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REPORT ON THE FOREST HIGHWAYS STUDY

REQUIRED BY SECTION 3(b) OF THE FEDERAL-AID HIGHWAY ACT OF 1958

SUBMITTED BY THE

BUREAU OF PUBLIC ROADS
DEPARTMENT OF COMMERCE

COMMITTEE ON PUBLIC WORKS
HOUSE OF REPRESENTATIVES
EIGHTY-SIXTH CONGRESS, SECOND SESSION

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LETTER OF TRANSMITTAL

DEPARTMENT OF COMMERCE,
Washington, D.C.

Hon. SAM RAYBURN,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: There is transmitted herewith the report of the forest highway study made pursuant to section 3(b) of the Federal-Aid Highway Act of 1958 (Public Law 85–381).

The study was undertaken in cooperation with the Secretary of Agriculture and the appropriate officers of each State containing a national forest.

The principal findings and recommendations of this study are presented in concise form in the forepart of the report. The data upon which these are based and other supplementary information are included for ready reference in the body of the report.

Pursuant to the provisions of section 3(b), copies of the report have been transmitted to the President.

Sincerely yours,

F. H. MUELLER,
Secretary of Commerce.

LETTER OF TRANSMITTAL.

REPORT ON
THE FOREST HIGHWAYS STUDY
REQUIRED BY SECTION 3(b)
OF THE FEDERAL-AID HIGHWAY ACT OF 1958

U.S. Department of Commerce
Bureau of Public Roads
January 1960

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REPORT ON THE FOREST HIGHWAYS STUDY

Purpose of the Report

This report is submitted in compliance with section 3(b) of the Federal-Aid Highway Act of 1958. This section requires that—

> The Secretary of Commerce, in cooperation with the Secretary of Agriculture and the appropriate officers of each State containing a national forest, the Commonwealth of Puerto Rico and the Territory of Alaska, shall make a study to determine:
>
> (1) the roads of primary importance to a State, county, or community which are within, adjoining, or adjacent to a national forest and have not been designated as forest highways;
>
> (2) the amount necessary to complete construction of all designated forest highways;
>
> (3) the amounts necessary for the fiscal year ending June 30, 1962, and for each of the nine succeeding fiscal years to survey, construct, reconstruct, and maintain (A) roads described in paragraph (1) of this subsection if such roads were forest highways, and (B) roads designated as forest highways, in accordance with a program to be recommended by the Secretary of Commerce after consultation with the Secretary of Agriculture; and
>
> (4) the method by which the amounts determined pursuant to paragraph (3) of this subsection should be apportioned for expenditure in the several States, Alaska, and Puerto Rico.
>
> The Secretary of Commerce shall report the results of such study to the President and the Congress on or before January 1, 1960.

Findings and Recommendations

Findings and recommendations made pursuant to section 3(b) of the Federal-Aid Highway Act of 1958:

1. The roads of primary importance to the States, counties, and communities which are within, adjoining, or adjacent to national forests, and have not been designated as forest highways, total 28,884 miles. Details concerning these findings are shown by States in table 2. Approximately 48 percent of this mileage is on the Federal-aid highway systems as follows:

National System of Interstate and Defense Highways	360
Primary system	2,332
Secondary system	11,272
Total	13,964

As a comparison, 82 percent of the mileage of presently designated forest highways is on a Federal-aid system: 19,927 miles out of a total of 24,399.

2. The amount necessary to complete construction of all presently designated forest highways to adequate standards is approximately $2,573 million. This estimate is shown by States on table 4:

3. A 10-year construction and maintenance program for roads of primary importance to the States, counties, and communities which are within, adjoining, or adjacent to national forests and have not

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been designated forest highways, in accordance with a program developed after consultation with the Secretary of Agriculture, is as follows:

Fiscal year	Construction	Maintenance	Fiscal year	Construction	Maintenance
	Thousands	*Thousands*		*Thousands*	*Thousands*
1962	$74,329	$21,274	1968	88,872	24,352
1963	86,655	21,834	1969	79,391	25,018
1964	82,527	22,346	1970	80,799	25,658
1965	80,067	22,883	1971	69,833	26,302
1966	87,078	23,369			
1967	73,262	23,885	Total	802,813	236,921

A 10-year construction and maintenance program for presently designated forest highways, in accordance with a program developed after consultation with the Secretary of Agriculture, is as follows:

Fiscal year	Construction	Maintenance	Fiscal year	Construction	Maintenance
	Thousands	*Thousands*		*Thousands*	*Thousands*
1962	$149,602	$28,408	1968	150,468	31,285
1963	131,086	28,861	1969	150,280	31,675
1964	120,761	29,322	1970	193,682	32,139
1965	108,185	29,880	1971	130,584	32,826
1966	117,595	30,227			
1967	112,645	30,819	Total	1,364,888	305,442

These 10-year construction and maintenance programs, totaling approximately $2,710 million, are shown in more detail on tables 6 through 16.

It is estimated that the 10-year construction programs, totaling about $2,168 million, could be financed by continued authorization of Federal forest-highway funds at the presently authorized level of $33 million annually, together with the use of all other funds normally expended on forest highways, including Federal-aid funds, State and local matching money, and other State and local funds.

Since Federal-aid funds are not eligible for maintenance of highways, and since, in the past, forest-highway funds have been used to the fullest extent possible for construction, the approximately $542 million estimated to be necessary for maintenance during the 10-year period is expected to be derived from State and local sources.

4. Apportionment of funds for the 10-year construction programs, outlined above, should be on the following bases:

To the extent that Federal-aid highway funds are used, they should be apportioned to the States in accordance with the formulas set forth in the present law.

To the extent that forest-highway funds are made available, they should continue to be apportioned on the same basis as provided in the Federal-Aid Highway Act of 1958, except that no apportionment should be made to a State if the sum to be apportioned to such State is less than $5,000, and such sum should be apportioned to the remaining States.

Brief History of the Forest Highway System

The forest-highway system was initially established following passage of the Federal Highway Act in 1921, and consists of individual

and frequently separated roads which are "of primary importance to the States, counties, or communities within, adjoining, or adjacent to the national forests." It is important that "forest highways" be distinguished from "forest development roads and trails," which are roads or trials of primary importance for the protection, administration, and utilization of the national forests, or for the use and development of the resources upon which communities within or adjacent to the national forests are dependent.

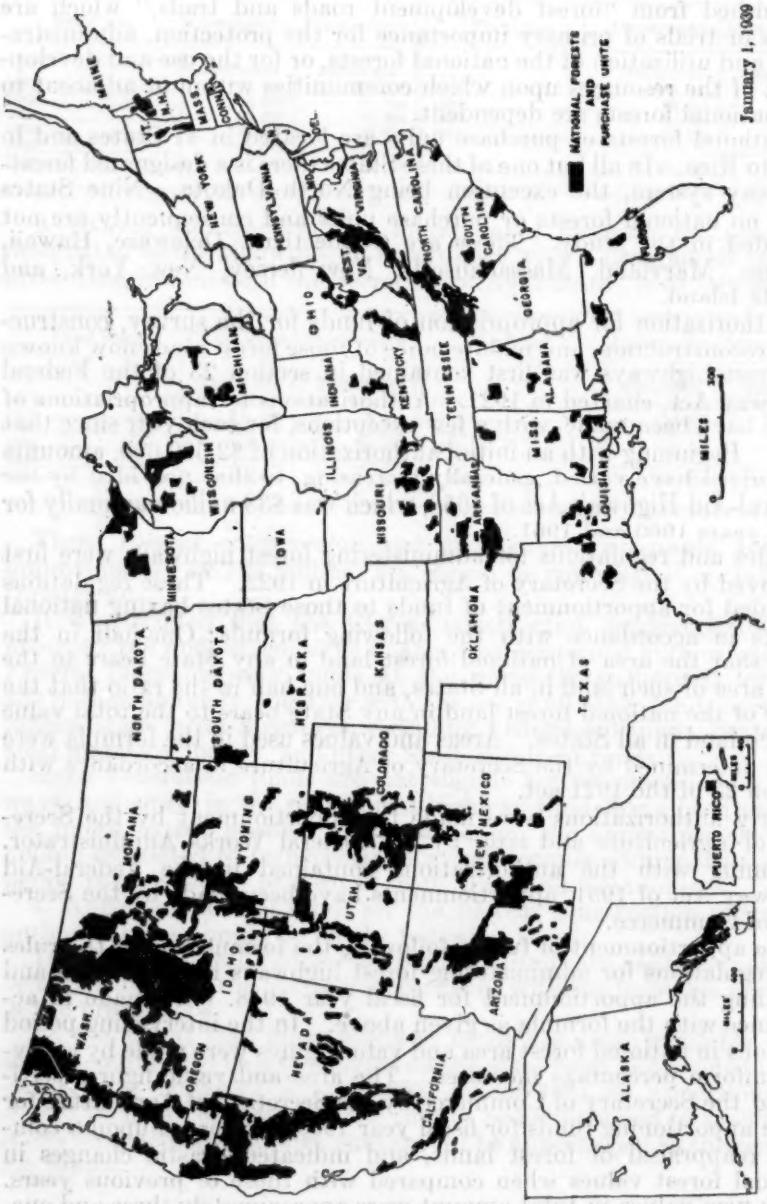
National forests or purchase units are located in 41 States and in Puerto Rico. In all but one of these States there is a designated forest-highway system, the exception being North Dakota. Nine States have no national forests or purchase units and consequently are not included in the study. These are Connecticut, Delaware, Hawaii, Kansas, Maryland, Massachusetts, New Jersey, New York, and Rhode Island.

Authorization for appropriation of funds for the survey, construction, reconstruction, and maintenance of those forest roads now known as forest highways was first contained in section 23 of the Federal Highway Act, enacted in 1921. Authorizations for appropriations of funds have been made, with a few exceptions, for each year since that time. Beginning with an initial authorization of $2,500,000, amounts authorized have varied, generally increasing, to that provided by the Federal-Aid Highway Act of 1958, which was $33 million annually for fiscal years 1960 and 1961.

Rules and regulations for administering forest highways were first approved by the Secretary of Agriculture in 1922. These regulations provided for apportionment of funds to those States having national forests in accordance with the following formula: One-half in the ratio that the area of national forest land in any State bears to the total area of such land in all States, and one-half in the ratio that the value of the national forest land in any State bears to the total value of such land in all States. Areas and values used in the formula were those determined by the Secretary of Agriculture in accordance with section 23 of the 1921 act.

Early authorizations were made for apportionment by the Secretary of Agriculture and later by the Federal Works Administrator. Beginning with the authorizations contained in the Federal-Aid Highway Act of 1951, apportionments have been made by the Secretary of Commerce.

The apportionment of funds, following the formulation of the rules and regulations for administering forest highways in 1922 up to and including the apportionment for fiscal year 1958, were made in accordance with the formula as given above. In the intervening period revisions in national forest area and value figures were made by applying uniform percentage increases. The area and value figures certified to the Secretary of Commerce by the Secretary of Agriculture for use in apportioning funds for fiscal year 1959 were based upon a complete reappraisal of forest lands, and indicated drastic changes in national forest values when compared with those of previous years. These new values in total amount were approximately three and one-half times greater than earlier values with no unformity in application. Values in some States were decreased.


NATIONAL FORESTS OF THE UNITED STATES
NATIONAL FORESTS AND PURCHASE UNITS
January 1, 1939
U.S. Department of Agriculture, Forest Service
MILES
MAINE
VT.
N.H.
MASS.
CONN.
NEW YORK
PENNSYLVANIA
OHIO
WEST VA.
VIRGINIA
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
FLORIDA
MICHIGAN
INDIANA
KENTUCKY
TENNESSEE
MISS.
ALABAMA
WISCONSIN
ILLINOIS
MISSOURI
ARKANSAS
LOUISIANA
MINNESOTA
IOWA
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
COLORADO
NEW MEXICO
MONTANA
WYOMING
UTAH
ARIZONA
IDAHO
NEVADA
WASH.
OREGON
CALIFORNIA
PUERTO RICO
ALASKA

After a thorough analysis of the new values, it was jointly agreed by the Secretaries of Agriculture and Commerce that the apportionment formula as contained in the regulations should be revised in order that the apportionments to the several States could be maintained at rates that would permit the program of improvement of forest highways to continue without major disruption. The analysis, as jointly determined, indicated that revision of the apportionment formula from the 50 percent area and 50 percent value to 75 percent area and 25 percent value would result in the retention of a reasonably satisfactory distribution of funds. The regulations were amended and the apportionment of funds for fiscal year 1959 was made on the basis of the 75 percent area and 25 percent value arrangement. The 1958 Federal-Aid Highway Act authorized the appropriation of $5 million for forest highways for fiscal year 1959 in addition to the $30 million previously authorized, and the sum of $33 million for each of fiscal years 1960 and 1961. The act provided that apportionment of such funds should be in accordance with the percentage rates as used in apportioning funds for fiscal year 1958, which had the effect of restoring the 50 percent area and 50 percent value formula as applied to forest area and value figures in use before the 1957 revaluation of national forest land.

Accomplishments

Expenditures on the forest-highway system from the inception of the program to June 30, 1958, from all sources of funds, total approximately $1.2 billion. Approximately 30 percent of this total was financed with forest-highway funds, approximately 25 percent with Federal-aid highway and other funds from Federal sources, and the remaining 45 percent, or $540 million, with funds provided by the States and local units of government.

Maintenance of the system through fiscal year 1958 has cost a total of approximately $330 million. From the inception of the program forest-highway funds have been utilized for construction to the fullest extent possible and, by agreement with the States or counties, these cooperating agencies have provided the major share (approximately 94 percent) of the total amount spent for maintenance.

Development of the Study

The several highway studies that have been undertaken and completed within the past few years by the Bureau of Public Roads with the cooperation of the State highway departments provided certain basic data of considerable benefit in undertaking the forest highways study. To the fullest extent possible this information has been used so as to avoid duplication of effort and to assist in making the subject study as comprehensive as possible.

The study was divided into four main stages as follows:

Stage 1—System selection;
Stage 2—Determination of needs;
Stage 3—Preparation of 10 annual construction and maintenance programs for fiscal years 1962 to 1971, inclusive;
Stage 4—Method of apportioning funds.

System selection (stage 1)

The act requires that a study be made to determine the roads of primary importance to a State, county, or community which are within, adjoining, or adjacent to a national forest which have not been designated as forest highways. The selection of these roads, designated in this report as group B roads, was initiated as soon as instructions could be prepared. Those instructions contained criteria to be used as guides in selecting the roads. These criteria were essentially the same as those used in the past in considering additions to the forest highway system. In making the determination of eligibility of roads for inclusion in group B, the difference between forest roads of primary importance to a State, county, or community and other forest roads required careful analysis. Other forest roads include forest-development roads which are defined as being of primary importance for the protection, administration, and utilization of the national forests or for the use and development of the resources upon which communities within or adjacent to the national forests are dependent. Group B roads were selected on the basis that they were essential from the standpoint of public service traffic as contrasted with forest development roads which are largely devoted to traffic related to the national forests.

The selection of group B roads was undertaken as a joint responsibility of the States, the Forest Service, and the Bureau of Public Roads.

Group B roads were classified in a manner comparable to that used in classifying designated forest highways, i.e.:

Class 1—Roads that are coincident with the Federal-aid primary system;

Class 2—Roads that are coincident with the Federal-aid secondary system;

Class 3—Other roads.

A fourth classification was introduced for the purpose of this study. This class includes those portions of group B roads coincident with the National System of Interstate and Defense Highways and is identified on accompanying tables as FAI–4. Since interstate routes are a part of the Federal-aid primary system, where mileage in the fourth class is shown in the tables, class 1 totals have been reduced accordingly. For the sake of consistency, the fourth class has also been applied in this report to the existing forest highway system with corresponding adjustment in class 1 mileage. Likewise, for this report, all roads in the existing forest-highway system are referred to as group A roads.

Treatment of roads adjoining or adjacent to the national forests was the same as that which has been applied in designating the existing forest-highway system. While some lack of uniformity has been noted in the selections made within the several States the basic concept as applied was to minimize the inclusion of roads outside forest boundaries. Irregular boundary lines, narrow corridor areas between national-forest segments, and the necessity of extending a route to a road junction outside the forest were features that required consideration in route selections. The national-forest boundaries as established by proclamation prior to July 1, 1958, were used in system determinations. This was necessary for the sake of consistency even

though in certain instances extensive adjustment of boundaries was under consideration.

Existing forest highways (group A roads) included in this report are those roads so designated as of July 1, 1958. Additions to and other modifications of the system that have taken place since that date have not been recognized in the data contained herein. However, actual lengths of designated forest-highway routes as found to exist by accurate determination during the course of the study have been used. These vary slightly from lengths given in other reports which included mileage of the forest-highway system.

The following criteria, either singly or in combination, were used as general guides in the selection of group B roads:

1. The roads should carry relatively heavy traffic volumes.
2. They should connect towns, communities, shipping points, markets, and timber stands within national forest areas.
3. They should serve as principal arteries of rural mail routes, schoolbus routes, farm-to-market roads, and/or provide access to rural churches, community meeting halls and recreational areas.
4. They should serve as collectors of traffic from several roads.
5. They should occur at reasonable intervals consistent with the density of population, recreational areas and timber stands.
6. They should serve as national defense roads or serve as access to military installations.
7. Other considerations.

Roads that were included in the Federal-aid primary and secondary systems were considered to be roads of primary importance in the area and this fact alone provided strong evidence of their eligibility. In a number of States projected (nonexisting) roads were included in the selection. This policy is consistent with the presently designated system of forest highways.

Tables 2 and 3 show the mileage of both group A and group B roads by classes in each of the several States having national forests.

A comparison of mileage of the existing forest-highway system (group A roads) with the acreage of land within national-forest boundaries indicates a great variation between the several States. The same is true of the group B roads. The miles of road per acre of national forest land in the Western States is much less than in the Middle West and Eastern States. This is due to a great extent to differences in population densities and to the extent of private ownership of land within forest boundaries. The forests of the West are largely composed of solid blocks of national-forest land where inholdings of private ownership are minor in extent. The reverse is true in the East. Roads serving these large tracts of privately owned land were, in many cases, in existence before the national forests were created.

It will also be noted that those States having no class 3 roads included in group A (or relatively small mileages of this class) have, in general, selected rather substantial mileages of class 3 roads in group B.

Regarding the class 3 roads in both groups A and B, studies have been made to determine the eligibility of these roads for inclusion in the Federal-aid secondary system. It has been found that all but a very small number of these roads meet the basic requirement for

eligibility since they directly connect with roads on the Federal-aid primary or secondary systems.

The roads included in the group B selection constitute a priority list for possible addition to the existing forest-highway system. As such, certain of these roads have been added to the system since the inception of the study on July 1, 1958. Addition of other routes as required to carry out the program would appear to be the desirable procedure as opposed to blanketing in all the group B roads in a single action. It is also believed desirable in making system revisions in each State that consideration be given to the removal from the system of those roads which no longer have the importance to the States, counties, and communities as was the case when the system was first developed. Such revisions should also take into consideration forest boundary adjustments and also roads in corridor areas outside the national forests.

TABLE 1.—*Areas of national forests (as of June 30, 1958)* [1]

[Acres]

State	Gross area within boundaries of national forests and purchase units	Net area owned by the United States	State	Gross area within boundaries of national forests and purchase units	Net area owned by the United States
Alabama	1,762,819	620,734	New Mexico	9,881,075	8,553,110
Arizona	12,103,743	11,328,496	North Carolina	3,324,636	1,123,337
Arkansas	3,591,350	2,364,429	North Dakota	520	520
California	24,273,352	19,941,025	Ohio	1,454,975	106,089
Colorado	15,193,551	13,725,338	Oklahoma	291,509	183,319
Florida	1,244,229	1,074,546	Oregon	17,137,209	14,828,216
Georgia	1,589,417	666,659	Pennsylvania	741,152	470,837
Idaho	21,569,307	20,274,524	South Carolina	1,423,340	587,278
Illinois	802,383	210,953	South Dakota	1,403,384	1,119,148
Indiana	722,460	117,118	Tennessee	1,211,897	594,768
Iowa	4,749	4,749	Texas	1,716,965	657,994
Kentucky	1,411,689	458,468	Utah	8,934,288	7,809,140
Louisiana	1,022,198	560,571	Vermont	629,004	230,366
Maine	81,306	45,862	Virginia	4,014,490	1,445,008
Michigan	5,103,478	2,550,371	Washington	10,742,074	9,688,940
Minnesota	5,065,275	2,782,274	West Virginia	1,832,868	903,137
Mississippi	2,774,932	1,047,089	Wisconsin	2,024,257	1,466,548
Missouri	3,384,841	1,360,691	Wyoming	9,016,135	8,566,134
Montana	19,055,944	16,635,393	Alaska	20,777,546	20,742,290
Nebraska	207,263	206,082	Puerto Rico	186,155	33,037
Nevada	5,378,726	5,057,911			
New Hampshire	804,965	677,404	Total	223,891,456	180,819,903

[1] Prepared from data issued by the Department of Agriculture November 1958.

TABLE 2.—*Mileage of roads included in the Forest Highways study by State and road group* [1]

[Mileage]

State	Group A					Group B				
	Class 1	Class 2	Class 3	FAI–4	Total	Class 1	Class 2	Class 3	FAI–4	Total
Alabama	83.1	232.5	47.7	-------	363.3	93.2	462.8	537.7	8.2	1,101.9
Arizona	254.0	550.9	176.0	71.8	1,052.7	-------	220.5	410.3	72.2	703.0
Arkansas	96.7	536.6	-------	-------	633.3	21.3	220.4	768.6	-------	1,010.3
California	564.1	439.7	1,334.3	104.3	2,442.4	94.2	296.6	1,880.6	-------	2,271.4
Colorado	549.8	537.2	372.0	23.2	1,482.2	-------	31.6	591.5	-------	623.1
Florida	32.7	211.3	45.8	-------	289.8	51.9	119.5	162.8	16.1	350.3
Georgia	152.6	185.8	28.3	-------	366.7	9.3	228.4	353.0	9.3	600.0
Idaho	565.1	303.4	262.7	76.4	1,207.6	356.1	167.5	1,040.0	-------	1,563.6
Illinois	241.2	45.5	14.7	-------	301.4	74.6	201.7	289.3	-------	565.6
Indiana	53.6	47.6	-------	-------	101.2	31.1	413.9	131.8	-------	576.8
Iowa	11.3	8.3	0.4	-------	20.0	-------	-------	-------	-------	-------
Kentucky	129.1	211.2	9.1	-------	349.4	15.6	360.9	75.7	74.7	535.9
Louisana	53.3	172.1	176.7	-------	402.1	10.0	3.9	282.4	-------	296.3
Maine	-------	-------	14.0	-------	14.0	8.6	5.4	8.2	-------	22.2
Michigan	566.1	549.2	23.8	24.7	1,163.8	45.0	1,926.9	122.5	2.3	2,096.7
Minnesota	311.6	321.7	70.5	-------	703.8	-------	214.1	754.3	-------	968.4
Mississippi	323.9	208.4	15.0	-------	547.3	57.9	459.4	223.5	30.6	771.4
Missouri	347.8	581.0	24.2	22.6	975.6	9.3	838.1	440.3	-------	1,287.7
Montana	597.3	208.0	304.9	86.0	1,196.2	238.6	133.3	611.5	38.0	1,021.4
Nebraska	-------	24.0	-------	-------	24.0	-------	-------	21.5	-------	21.5
Nevada	155.0	164.2	49.7	-------	368.9	-------	64.0	145.9	-------	209.9
New Hampshire	60.0	40.3	54.1	0.8	155.2	25.9	29.6	24.7	25.1	105.3
New Mexico	116.9	413.6	97.7	14.3	642.5	-------	87.4	331.6	-------	419.0
North Carolina	365.5	423.2	41.3	-------	830.0	242.2	730.8	256.9	27.8	1,257.7
North Dakota	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Ohio	67.4	43.3	19.9	-------	130.6	325.6	1,052.9	70.5	-------	1,449.0
Oklahoma	29.6	16.6	-------	-------	46.2	-------	27.5	77.7	-------	105.2
Oregon	641.2	464.1	259.3	36.9	1,401.5	147.9	186.5	1,074.2	9.7	1,418.3
Pennsylvania	116.6	93.2	144.2	-------	354.0	-------	10.5	102.9	-------	113.4
South Carolina	238.2	439.2	97.5	-------	774.9	-------	145.0	251.8	18.6	415.4
South Dakota	187.1	102.6	11.4	-------	301.1	-------	99.6	174.6	-------	274.2
Tennessee	172.8	322.7	66.2	7.0	568.7	4.4	27.9	294.2	4.5	331.0
Texas	127.2	182.5	32.4	-------	342.1	4.8	142.2	400.4	8.9	556.3
Utah	169.7	230.8	280.9	54.5	735.9	-------	31.7	597.2	-------	628.9
Vermont	30.7	57.3	23.2	-------	111.2	20.4	111.6	39.9	-------	171.9
Virginia	338.1	914.5	111.2	40.9	1,404.7	98.3	1,194.3	293.9	13.5	1,600.0
Washington	449.0	127.8	123.0	30.2	730.0	271.8	297.7	489.5	-------	1,059.0
West Virginia	78.4	364.9	52.4	-------	495.7	17.5	297.6	392.6	-------	707.7
Wisconsin	75.8	344.2	38.4	-------	458.4	18.6	193.7	473.1	-------	685.4
Wyoming	344.5	107.6	18.6	-------	470.7	-------	14.1	714.8	-------	728.9
Alaska	164.4	202.1	30.4	-------	396.9	38.0	213.0	3.5	-------	254.5
Puerto Rico	-------	42.5	-------	-------	42.5	-------	-------	5.8	-------	5.8
Total	8,861.4	10,471.6	4,471.9	593.6	24,398.5	2,332.1	11,271.5	14,921.2	359.5	28,884.3

[1] Reported in 1959 by State highway departments as of June 30, 1958.

TABLE 3.—*Combined mileage of roads included in the forest-highways study by State*[1]

[Mileage]

State	Group A and group B combined				
	Class 1	Class 2	Class 3	FAI-4	Total
Alabama	176.3	695.3	585.4	8.2	1,465.2
Arizona	254.0	771.4	586.3	144.0	1,755.7
Arkansas	118.0	757.0	768.6		1,643.6
California	658.3	736.3	3,214.9	104.3	4,713.8
Colorado	549.8	568.8	963.5	23.2	2,105.3
Florida	84.6	330.8	208.6	16.1	640.1
Georgia	161.9	414.2	381.3	9.3	966.7
Idaho	921.2	470.9	1,302.7	76.4	2,771.2
Illinois	315.8	247.2	304.0		867.0
Indiana	84.7	461.5	131.8		678.0
Iowa	11.3	8.3	.4		20.0
Kentucky	144.7	581.1	84.8	74.7	885.3
Louisiana	63.3	176.0	459.1		698.4
Maine	8.6	5.4	22.2		36.2
Michigan	611.1	2,476.1	146.3	27.0	3,260.5
Minnesota	311.6	535.8	824.8		1,672.2
Mississippi	381.8	667.8	238.5	30.6	1,318.7
Missouri	357.1	1,419.1	464.5	22.6	2,263.3
Montana	835.9	341.3	916.4	124.0	2,217.6
Nebraska		24.0	21.5		45.5
Nevada	155.0	228.2	195.6		578.8
New Hampshire	85.9	69.9	78.8	25.9	260.5
New Mexico	116.9	501.0	429.3	14.3	1,061.5
North Carolina	607.7	1,154.0	298.2	27.8	2,087.7
North Dakota					
Ohio	393.0	1,096.2	90.4		1,579.6
Oklahoma	29.6	44.1	77.7		151.4
Oregon	789.1	650.6	1,333.5	46.6	2,819.8
Pennsylvania	116.6	103.7	247.1		467.4
South Carolina	238.2	584.2	349.3	18.6	1,190.3
South Dakota	187.1	202.2	186.0		575.3
Tennessee	177.2	350.6	360.4	11.5	899.7
Texas	132.0	324.7	432.8	8.9	898.4
Utah	169.7	262.5	878.1	54.5	1,364.8
Vermont	51.1	168.9	63.1		283.1
Virginia	436.4	2,108.8	405.1	54.4	3,004.7
Washington	720.8	425.5	612.5	30.2	1,789.0
West Virginia	95.9	662.5	445.0		1,203.4
Wisconsin	94.4	537.9	511.5		1,143.8
Wyoming	344.5	121.7	733.4		1,199.6
Alaska	202.4	415.1	*33.9		651.4
Puerto Rico		42.5	5.8		48.3
Total	11,193.5	21,743.1	19,393.1	953.1	53,282.8

[1] Reported in 1959 by State highway departments as of June 30, 1958.

Determination of needs (stage 2)

To comply with the request of Congress for "the amount necessary to complete construction of all designated forest highways" (required by sec. 3(b)(2)) it has been necessary to determine the needs of the system. By referring to needs, which in turn are related to a specific period, to specific standards of construction and to definite traffic volumes, the cost of developing the system to meet these conditions can be determined within a reasonable degree of accuracy. Without first fixing these objectives the amount necessary to complete the system would be indeterminate. In order to fix these objectives, the determination of needs of the system was based upon standards considered adequate to meet anticipated 1975 traffic demands.

The work of estimating needs was largely undertaken by the several State highway departments. Cost estimates were agreed upon at the field level by officials of the State highway departments and the Bureau of Public Roads, and reviewed and coordinated at the regional and Washington offices of the Bureau.

To coordinate the program requirements of the study with the estimate of needs and to secure the greatest possible benefit from the use of material obtained previously in similar studies with the least amount of adjustment of data and duplication of effort, it was decided to fix the needs of the forest-highway system in two deficiency categories as follows:

1. Present deficiencies: Those road segments which, when measured by tolerable standards, were found to be deficient as of July 1, 1958 (beginning of study period). In effect this was a determination of the adequacy of the system to meet the then existing traffic service demands.

2. Future deficiencies: Those road segments which, when measured by tolerable standards, were found to be tolerable as of July 1, 1958, but which are expected to become deficient by July 1, 1971 (end of program period).

Other highway studies from which data have been taken to determine needs as reported in this study include—

(*a*) The cost to complete the National System of Interstate and Defense Highways as required by section 108(d) of the Federal-Aid Highway Act of 1956. (Material from this study was used to determine the needs of those portions of the forest-highway system that are coincident with the Interstate System after adjustment of unit prices to the price level for the first half of 1958.)

(*b*) The estimate of needs prepared in connection with studies made pursuant to section 210 of the Highway Revenue Act of 1956. (To the fullest extent possible material obtained for the sec. 210 study, and not yet published, has been used in the forest-highways study. When used it has been subject to review and adjustment to obtain the degree of accuracy required and to fix the cost level of estimates to that established for the subject report. This cost level was that prevailing during the first half of calendar year 1958.)

The needs of those roads described above as "group B" roads were also determined, since this information was obviously necessary in order to satisfactorily develop material required for the program phase of the study. These determinations were made in the same manner as were the needs of group A roads.

To determine deficiencies and to assist in estimating the cost to overcome these deficiencies, the standards used in the section 210 study were again used in the current study for all systems other than the Interstate System. In States where State standards were found to be only slightly different from those prescribed for the forest-highways study, State standards were used to avoid the cost of re-estimating inasmuch as the differential in the total estimate would not be significant.

The greatest possible accuracy, considering the scope of the study and the time available for its completion, was required in the preparation of cost estimates. Field review by experienced engineers was a requirement. For those projected routes where there were no existing roads, use of aerial photography and photogrammetric methods were employed.

TABLE 4.—*Summary of reported construction needs, fiscal years 1959–71, by State and road group*

[Thousands of dollars]

State	Group A needs									Group B needs									Combined total, group A and group B needs
	Class 1		Class 2		Class 3		FAI 4		Total	Class 1		Class 2		Class 3		FAI 4		Total	
	Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency		Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency		
Alabama	3,100	4,527	1,193	2,840	965	77			12,702	2,287	4,251	6,351	1,715	13,249	506	7,423		35,782	48,484
Arizona	5,678	13,762	26,433	12,081	10,123	2,083	31,032	97	101,289			12,359	2,964	33,482	1,238	15,829	6,357	72,229	173,518
Arkansas		2,075	12,895	3,674					18,644	1,284	155	8,584	71	21,326	12			31,432	50,076
California	83,735	90,978	34,883	45,073	132,085	152,209	43,634	104,905	687,502	27,981	6,376	17,997	23,430	255,141	82,509			413,434	1,100,936
Colorado	64,464	19,932	36,086	4,210	34,649	680	5,834	15,317	181,172			1,868	322	62,868	841			65,899	247,071
Florida		1,175	2,654	4,131	1,684				9,644	824	1,893	2,675	3,101	5,025	118	3,991		17,627	27,271
Georgia	6,734		9,089	3,161	638				19,622			6,280	2,403	12,098	558	7,657		28,996	48,618
Idaho	37,386	1,100	25,761	32	14,465	109	59,325		138,178	27,160	424	9,574	560	113,592	588			151,898	290,076
Illinois	17,257	2,272	44	608	2,048				22,229	5,039	1,086	5,472	3,125	8,734	2,478			25,934	48,163
Indiana	2,936	6,497	2,950	476					12,859		4,582	13,792	11,073	1,904				31,351	44,210
Iowa	498		609						1,107										1,107
Kentucky	19,188		12,073	1,690	378				33,329	1,444	186	16,782	1,797	2,643	316	85,678		108,846	142,175
Louisiana	161	149	3,177	821	3,266	1,328			8,902					6,681	1,007			7,688	16,590
Maine					1,451				1,451	1,555		570		719				2,844	4,295
Michigan	27,838	42,510	16,467	5,474	2,951		14,817		110,057	629	5,361	63,560	3,021	3,363	1,090	2,109		79,133	189,190
Minnesota	1,852	13,805	6,685	5,753	2,549	166			30,810			3,870	1,789	23,659	1,686			31,004	61,814
Mississippi	3,170	28,868	12,805	4,216	212	414			49,685	3,166	2,137	12,206	9,442	2,639	1,695	14,958		46,243	95,928
Missouri	10,797	19,902	9,744	5,324	370		6,414		52,551		1,098	7,736	3,673	9,469	800			22,776	75,327
Montana	45,057	7,404	10,304		19,026	2,133	29,053		112,977	17,049	3,098	6,942	878	46,497	4,906	22,395		101,756	214,742
Nebraska			558	9					567					633				633	1,200
Nevada	7,363	4,932	3,216	2,165	3,375	30			21,111			930		7,257				8,187	29,298
New Hampshire	7,572	117	3,542	33	4,080	2,133	1,462		18,939	3,609		3,920	550	2,475	445	27,450		38,449	57,388
New Mexico	7,843	1,862	15,629	8,456	6,732		861	6,015	47,398			3,956	332	20,475	180			24,943	72,341
North Carolina	7,425	10,995	7,169	3,653	1,274	441			30,957	1,992	5,079	21,653	6,653	15,446	218	22,818		73,859	104,816
North Dakota																			
Ohio	15,181		7,488		1,559				24,228	75,907		121,513	6,317	7,791				211,528	235,756
Oklahoma	64								64			547		1,994				2,541	2,605
Oregon	73,831	43,462	32,777	5,302	18,249	4,399	22,845	6,728	207,593	14,651	8,617	24,347	281	121,719	4,077	961		174,653	382,246
Pennsylvania	6,187	11,490	5,807	4,099	11,419	1,077			40,079				403	3,492	837			4,732	44,811
South Carolina	3,116	3,433	1,508	1,924	1,394				11,375			730	58	4,212	206	494		5,700	17,075
South Dakota	19,174	8,735	4,947	5,516	1,305				39,677			7,611	2,476	9,889				19,976	59,653
Tennessee	14,889	2,101	16,070	3,957	3,649	56	9,363		50,085		37	1,053	357	15,965	3	6,017		23,432	73,517
Texas	3,301	1,407	5,008	1,506	660	56			11,938	544		716	1,077	7,270	932	3,952		14,491	26,429

Utah	9,193	3,924	8,442	1,073	15,427	1,577	14,465	------	54,101	------	------	339	281	34,576	251	------	------	35,447	89,548
Vermont	4,317	893	1,906	339	739	------	------	------	8,194	2,035	------	4,854	1,594	232	24	------	------	8,739	16,933
Virginia	49,066	4,767	40,583	3,787	4,180	------	85,763	------	188,146	11,278	16,460	62,913	2,503	12,200	423	15,897	------	121,674	309,820
Washington	36,650	10,085	3,878	2,316	8,070	1,140	6,441	------	68,580	26,833	6,790	17,740	3,482	65,623	3,919	------	------	124,387	192,967
West Virginia	4,620	4,867	11,325	8,142	1,809	443	------	------	31,206	2,774	861	8,578	4,684	15,766	848	------	------	33,511	64,717
Wisconsin	28	982	3,219	1,549	546	437	------	------	6,761	------	------	1,152	921	3,216	1,417	------	------	6,706	13,467
Wyoming	30,685	152	7,060	------	1,537	------	------	------	39,434	------	------	584	------	42,918	------	------	------	43,502	82,936
Alaska	9,966	5,234	44,058	356	1,016	3,263	------	------	63,893	8,686	------	51,669	------	985	------	------	------	61,340	125,233
Puerto Rico	------	------	3,475	------	------	------	------	------	3,475	------	------	------	------	1,066	------	------	------	1,066	4,541
Total	640,322	374,424	451,517	153,746	313,880	174,251	331,309	133,062	2,572,511	236,727	68,491	531,423	101,333	1,018,289	114,128	237,629	6,357	2,314,377	4,886,888

Cost estimates were developed for each route segment found to be deficient (i. e., deficient as of July 1, 1958 or estimated to become deficient before July 1, 1971). Estimates included nine items as follows:

1. Preliminary engineering.
2. Right-of-way.
3. Utility adjustments.
4. Grading, drainage, minor structures.
5. Base, surfacing and shoulders.
6. Structures over 20 feet in length.
7. Roadside development.
8. Traffic and pedestrian services.
9. Construction engineering and contingencies.

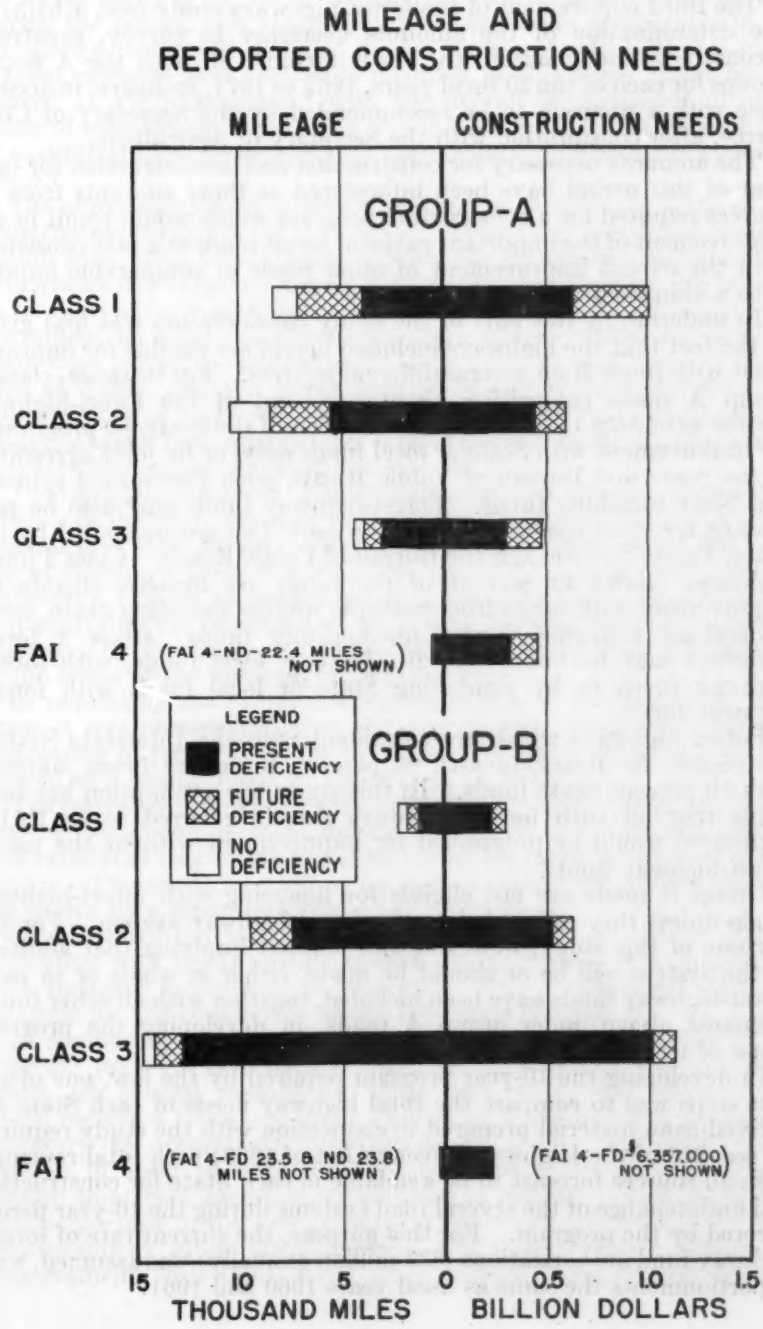
Improvement work which had been authorized but not completed prior to July 1, 1958, was not included in the needs estimates.

The total needs of the existing forest-highway system (group A roads) to provide adequately for estimated 1975 traffic volumes, as determined by this study are $2,572,511,000. The total needs of the group B roads, which involve greater total mileage, but a larger proportion or secondary type roads than group A, are $2,314,377,000, to provide adequately for estimated 1975 traffic volumes.

The needs in mileage and costs by classes of roads in each group are shown graphically in figure 1. This graph serves to illustrate the point that the needs of class 1 roads in group A are the greatest of that group while the needs of class 3 roads are the least. The reverse is true for group B roads.

Table 4, above, in addition to showing needs for each group by class of road, also provides a breakdown of estimated costs by deficiency category. For group A approximately 68 percent of the total costs result from estimates of improvements necessary to correct present deficiencies. For group B this figure is approximztely 87 percent. In each group the mileage estimated to be adequate for 1975 traffic, i.e., mileage having no deficiencies, was found to be a small part of the total (17 percent for group A and 9 percent for group B).

FIGURE 1


MILEAGE AND
REPORTED CONSTRUCTION NEEDS
MILEAGE
CONSTRUCTION NEEDS
GROUP-A
CLASS 1
CLASS 2
CLASS 3
FAI 4
(FAI 4-ND-22.4 MILES NOT SHOWN)
LEGEND
PRESENT DEFICIENCY
FUTURE DEFICIENCY
NO DEFICIENCY
GROUP-B
CLASS 1
CLASS 2
CLASS 3
FAI 4
(FAI 4-FD 23.5 & ND 23.8 MILES NOT SHOWN)
(FAI 4-FD $6,357,000 NOT SHOWN)
15
10
5
0
0.5
1.0
1.5
THOUSAND MILES
BILLION DOLLARS

Program determination (stage 3)

The third requirement of the forest highways study (sec. 3(b)(3)) is the determination of the amounts necessary to survey, construct, reconstruct, and maintain the roads included in both the A and B groups for each of the 10 fiscal years, 1962 to 1971, inclusive, in accordance with a program to be recommended by the Secretary of Commerce, after consultation with the Secretary of Agriculture.

The amounts necessary for construction and reconstruction for each year of this period have been interpreted as those amounts from all sources required for a construction program which would result in the improvement of the important national forest roads at a rate consistent with the overall improvement of other roads of comparable importance within each State.

In undertaking this part of the study consideration was first given to the fact that the highways included herein are eligible for improvement with funds from several different sources. For instance, class 1, group A roads comprising about one-third of the forest-highway system as of July 1, 1958, may, by decision of the State, be programed for improvement with State or local funds only, or by joint agreement of the State and Bureau of Public Roads, with Federal-aid primary and State matching funds. Forest-highway funds may also be programed for these roads in whole or in part if so recommended by the State, Forest Service, and the Bureau of Public Roads. Class 2 forest highways (about 43 percent of the total) are likewise eligible for improvement with funds from multiple sources including State, local, Federal-aid secondary and forest-highway funds. Class 3 forest highways may be improved with State or local funds, with forest-highway funds or by combining State or local funds with forest-highway funds.

Forest highways which are coincident with the Interstate System are eligible for financing with 90 percent Interstate funds matched with 10 percent State funds. In this study the assumption has been made that all such forest highways (herein referred to as FAI–4 highways) would be programed for improvement without the use of forest-highway funds.

Group B roads are not eligible for financing with forest-highway funds unless they are added to the forest-highway system. For the purpose of this study, however, and without implying that addition to the system will be or should be made, either in whole or in part, forest-highway funds have been included, together with all other funds discussed above under group A roads, in developing the program phase of the report.

In developing the 10-year program required by the law, one of the first steps was to compare the total highway needs of each State (as derived from material prepared in connection with the study required by sec. 210 of the Highway Revenue Act of 1956) with total revenues from all sources forecast to be available in each State for construction and maintenance of the several road systems during the 10-year period covered by the program. For this purpose, the current rate of forest-highway fund authorizations ($33 million annually) was assumed, with apportionments the same as fiscal years 1960 and 1961.

Comparison of these elements permitted determination of the rate at which highway needs of the several road systems could be met during the period, and specifically those highways comparable in importance to the roads included in this study. Analysis of this information revealed that the roads included in this study could be improved at a rate consistent with the overall improvement of other roads of comparable importance within each State at the current rate of authorization of forest-highway funds combined with other available funds.

The above-mentioned factors were used to develop the scope of the construction programs for each State. Priority of individual projects within each State was established from the information pertaining to deficiencies developed in stage 2, taking into consideration the benefits to be derived in overall reduction in expenditures by advancing improvement of those road segments upon which annual maintenance costs were excessive because of structural inadequacies, safety requisites of traffic, and the advantages to be gained from continuity of improvement of route segments. This resulted in the programing of future deficient road segments, in some instances, before all the present deficient road segments in a State were satisfied.

The annual programs were determined jointly by appropriate officials of the State highway department, the Forest Service, and the Bureau of Public Roads. Joint cooperative efforts varied from the use of simple conference methods to the utilization of mathematical sufficiency ratings to determine program priorities. In assembling and analyzing the programs on an overall national basis it was found necessary by the Bureau of Public Roads to make some adjustments in the scope of the program for certain States.

In requesting the cooperation of the States in developing the program it was emphasized that the arrangement of projects and the forecasting of funds available to finance the work would not be considered as a commitment by the States.

The following tables reflect the cost of improvements expected to be possible of accomplishment during each year of the 10-year period. The estimated cost of maintenance for each year of this period is also shown. The needs forecast to be retired during the 1958–61 period are shown by a separate table.

In all States the total needs for FAI–4 roads (portion of class 1 coincident with the Interstate System) in both group A and group B, were included in the several programs. This is consistent with the schedule for the completion of the Interstate System.

In comparing programs for a particular State for each year of the program period a considerable variation in amounts will be noted. There are several reasons for these variations. For those States which receive a relatively small amount of forest-highway funds it is necessary to accumulate apportionments to the maximum extent possible in order to have sufficient funds to finance a project large enough to attract adequate competition in bidding. This is particularly important in the case of projects for which no funds other than forest-highway funds are available. For those projects eligible for improvement with funds from other sources, (i.e., Federal-aid and

State matching funds) the demands of other work elsewhere in the State influence the amounts that can be programed for projects on the forest-highway system. Frequently, where necessary improvements are confined to a few routes, program fluctuations result from projects being scheduled in a manner to avoid conflict in actual construction operations, i.e., to insure the completion of one project before adjacent contracts are started. These items also account for the variations in the annual amounts shown in table 17—summary of construction and maintenance programs by fiscal years.

The recommended program should result in the advancement of forest-highway improvements at approximately the same rate as the improvement of other primary and secondary highways of a comparable nature in each State.

TABLE 5.—*Summary of construction programs, fiscal years 1959–61, by State and road group*

[Thousands of dollars]

TABLE 5.—*Summary of construction programs, fiscal years 1959–61, by State and road group*

[Thousands of dollars]

State	Group A construction programs					Group B construction programs					Combined total, group A and group B construction programs
	Class 1	Class 2	Class 3	FAI–4	Total	Class 1	Class 2	Class 3	FAI–4	Total	
Alabama		991			991	3,778	1,446	1,042		6,266	7,257
Arizona	2,290	4,656		10,032	16,978				15,829	15,829	32,807
Arkansas		2,606			2,606	1,185		1,010		2,195	4,801
California	4,905	1,360	15,326	22,351	43,942	605	1,814			2,419	46,361
Colorado	7,023	6,456	1,375	4,966	19,820						19,820
Florida		1,183	78		1,261	824	907		3,991	5,722	6,983
Georgia	1,615	2,153	179		3,947		1,706	2,928	7,657	12,291	16,238
Idaho	7,847	3,767	725	18,033	30,372	1,169	70	1,876		3,115	33,487
Illinois	2,083	217			2,300		1,285			1,285	3,585
Indiana											
Iowa											
Kentucky	7,260	562			7,822		665		27,829	28,494	36,316
Louisiana	161	1,499	482		2,142			1,130		1,130	3,272
Maine			34		34						34
Michigan	4,400	9,667		5,017	19,084	548	2,697			3,245	22,329
Minnesota		802	222		1,024						1,024
Mississippi	1,250	1,717	147		3,114	2,414	583	365	6,221	9,583	12,697
Missouri		737			737		3,796			3,796	4,533
Montana	6,166	2,602		10,814	19,582	1,410	738	355	10,685	13,188	32,770
Nebraska		121			121						121
Nevada			565		565						565
New Hampshire	413	634	563		1,610		290			290	1,900
New Mexico		5,903			5,903						5,903
North Carolina	2,330	2,404			4,734	1,828	5,738	1,990	21,818	31,374	36,108
North Dakota											
Ohio	862				862	25,183	2,491			27,674	28,536
Oklahoma	64				64		400			400	464
Oregon	6,159	2,245	5,583	11,755	25,742	259	3,106	3,760	961	8,086	33,828
Pennsylvania	2,537	1,240	160		3,937			537		537	4,474
South Carolina	955	585	582		2,122		73	112	494	679	2,801
South Dakota	1,571	339	401		2,311						2,311
Tennessee	2,381	582			2,963	37				37	3,000
Texas	620	1,709	641		2,970	544		535	3,952	5,031	8,001
Utah		1,870	400		2,270						2,270
Vermont	164	467			631		81			81	712
Virginia	2,237	4,248	320	16,650	23,455	925	2,573		15,897	19,395	42,850
Washington	6,921	904	1,261	606	9,692	1,546	1,446	24		3,016	12,708
West Virginia		1,710	659		2,369		922	118		1,040	3,409
Wisconsin		295	667		962		340			340	1,302
Wyoming	3,216				3,216						3,216
Alaska	3,515	6,326			9,841		1,000			1,000	10,841
Puerto Rico		1,583			1,583						1,583
Total	78,945	74,140	30,370	100,224	283,679	42,255	34,167	15,782	115,334	207,538	491,217

TABLE 6.—*Summary of construction and maintenance programs, fiscal years 1962–71, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	4,229	1,447	912		6,588	3,454	1,592	5,614	2,516	7,423	17,145	5,512	23,733	8,966
Arizona	17,150	22,129	7,728	21,097	68,104	10,325		8,717	8,923	6,357	23,997	4,590	92,101	14,915
Arkansas	1,971	6,236			8,207	5,168	172	2,761	8,112		11,045	3,530	19,252	8,698
California	66,964	44,430	54,188	126,188	291,770	40,477	27,442	16,399	28,390		72,231	10,408	364,001	50,885
Colorado	29,543	20,164	7,151	16,185	73,043	19,155		1,661	12,174		13,835	3,687	86,878	22,842
Florida	1,175	3,500	1,606		6,281	1,784	1,893	2,039	3,713		7,645	1,981	13,926	3,765
Georgia	5,036	7,890	459		13,385	5,279		5,808	9,728		15,536	3,964	28,921	9,243
Idaho	27,452	11,023	7,895	41,292	87,662	11,712	11,358	935	33,621		45,914	6,314	133,576	18,026
Illinois	10,408	208			10,616	6,786	3,063	2,729	1,579		7,371	5,103	17,987	11,889
Indiana	2,936	1,827			4,763	780	690	6,021	551		7,262	3,250	12,025	4,030
Iowa	498	609			1,107	119							1,107	119
Kentucky	3,441	4,013			7,454	3,730	1,630	7,844		57,849	67,323	4,723	74,777	8,453
Louisiana	149	2,499	3,663		6,311	4,069			4,060		4,060	1,452	10,371	5,521
Maine			36		36	52	424	138	24		586	149	622	201
Michigan	21,315	4,955	2,951	9,800	39,021	25,750	81	13,485	716	2,109	16,391	41,930	55,412	67,680
Minnesota	15,657	11,636	2,493		29,786	6,967		4,357	19,705		24,062	6,526	53,848	13,493
Mississippi	11,883	4,975	70		16,928	4,786	988	3,346	1,479	8,737	14,550	5,627	31,478	10,413
Missouri	23,267	14,069	370	6,414	44,120	10,959	1,098	4,475	8,297		13,870	8,859	57,990	19,818
Montana	40,746	6,423	8,702	18,239	74,110	6,272	11,729	5,012	20,520	11,710	48,971	4,642	123,081	10,914
Nebraska		325			325	62			165		165	15	490	77
Nevada	9,285	5,381	2,110		16,776	4,003		930	2,940		3,870	376	20,646	4,379
New Hampshire	4,031	2,061	1,130	1,462	8,684	3,750	825	1,456	2,353	27,450	32,084	3,243	40,768	6,993
New Mexico	8,929	7,864	1,346	6,876	25,015	6,148		2,530	4,131		6,661	3,023	31,676	9,171
North Carolina	16,090	4,828	604		21,522	9,629	5,243	20,000	11,126	1,000	37,369	11,779	58,891	21,408
North Dakota														
Ohio	11,250	453	982		12,685	4,078	25,513	31,852	3,411		60,776	35,120	73,461	39,198
Oklahoma						750		147	1,434		1,581	796	1,581	1,546
Oregon	80,455	24,765	10,870	17,818	133,918	23,524	18,538	10,643	39,336		68,517	9,086	202,435	32,610
Pennsylvania	9,061	5,550	3,699		18,310	4,819			2,975		2,975	775	21,285	5,594
South Carolina	3,756	2,610	812		7,178	6,216		657	2,300		2,957	2,101	10,135	8,317
South Dakota	21,757	8,361	265		30,383	3,837		8,360	2,377		10,737	1,922	41,120	5,759
Tennessee	5,389	7,012	740	9,363	22,504	5,354		380	3,095	6,017	9,492	1,393	31,996	6,747
Texas	3,207	4,243			7,450	2,430		558	4,856		5,414	3,320	12,864	5,750
Utah	13,117	6,945	8,159	14,465	42,685	4,788		339	15,720		16,059	3,684	58,745	8,472
Vermont	3,323	1,150	207		4,680	2,880	684	3,111	235		4,030	3,551	8,710	6,431
Virginia	18,234	11,018	291	69,113	98,656	19,765	4,203	15,332	1,867		21,402	13,237	120,058	33,002
Washington	35,032	5,290	3,466	5,835	49,623	16,922	24,796	12,487	25,548		62,831	14,106	112,454	31,028
West Virginia	815	3,985	1,451		6,251	1,199	623	2,813	948		4,384	891	10,635	2,090
Wisconsin	1,010	4,473	316		5,799	3,855		1,442	1,559		3,001	2,824	8,800	6,679
Wyoming	27,621	7,060	1,537		36,218	5,296		458	16,139		16,597	1,624	52,815	6,920
Alaska	6,437	19,231			25,668	8,087		19,461			19,461	1,765	45,129	9,852
Puerto Rico		1,265			1,265	426			656		656	43	1,921	469
Total	562,629	301,903	136,209	364,147	1,364,888	305,442	142,585	224,297	307,279	128,652	802,813	236,921	2,167,701	542,363

TABLE 7.—*Construction and maintenance programs, fiscal year 1962, by State and road group*

[Thousands of dollars]

TABLE 7.—*Construction and maintenance programs, fiscal year 1962, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI-4	Total		Class 1	Class 2	Class 3	FAI-4	Total			
Alabama						343	1,291	852	320		2,463	542	2,463	885
Arizona	781	7,429	203	5,000	13,413	860						380	13,413	1,240
Arkansas		668			668	522	99	152	432		683	336	1,351	858
California	849	1,415	7,098	10,583	19,945	4,083	8,089	1,345	987		10,421	1,015	30,366	5,098
Colorado	3,911	2,533			6,444	1,676		802	637		1,439	267	7,883	1,943
Florida	46	107	533		686	174	573				573	166	1,259	340
Georgia	398	629			1,027	476		364	808		1,172	348	2,199	824
Idaho	3,817	716	533	3,860	8,926	1,115	1,061	170	2,989		4,220	626	13,146	1,741
Illinois	385	85			470	563	1,747	176	69		1,992	439	2,462	1,002
Indiana	123				123	78		766	19		785	325	908	403
Iowa	55				55	14							55	14
Kentucky	1,218				1,218	373	1,073			4,930	6,003	399	7,221	772
Louisiana		189	313		502	405			361		361	141	863	546
Maine						6						15		21
Michigan	2,071	733	594	9,800	13,198	2,575	81	1,725	436	2,109	4,351	4,193	17,549	6,768
Minnesota	388	3,872	962		5,222	554						455	5,222	1,009
Mississippi	1,254	460			1,714	413		306	162		468	476	2,182	889
Missouri	2,229	1,672	315		4,216	975		1,066	809		1,875	715	6,091	1,690
Montana	6,725	955	399	142	8,221	628	803	663	3,214		4,680	428	12,901	1,056
Nebraska						6						1		7
Nevada	3,029		405		3,434	422						14	3,434	436
New Hampshire	234	565			799	329	211		340		551	231	1,350	560
New Mexico	1,549			1,193	2,742	615		190	490		680	303	3,422	918
North Carolina	1,673	1,847			3,520	918	670	2,710	898	707	4,985	1,047	8,505	1,965
North Dakota														
Ohio	4,177	453	188		4,818	358		2,959			2,959	3,109	7,777	3,467
Oklahoma						75			146		146	79	146	154
Oregon	8,009	2,992	843	3,783	15,627	2,164	2,806	1,112	4,350		8,268	825	23,895	2,989
Pennsylvania	2,551	564	71		3,186	419			100		100	64	3,286	483
South Carolina	371	316	395		1,082	535		53			53	161	1,135	696
South Dakota	2,357	688			3,045	333		1,573			1,573	173	4,618	506
Tennessee	312	426	59		797	507						118	797	625
Texas	143	791			934	243		59	213		272	332	1,206	575
Utah	2,190	1,076	561		3,827	436		129	1,674		1,803	339	5,630	775
Vermont			15		15	237			24		24	292	39	529
Virginia	1,152	2,017		1,439	4,608	1,890	682	319	10		1,011	1,196	5,619	3,086
Washington	4,000	546	360	581	5,487	1,394	3,002	1,277	2,717		6,996	1,224	12,483	2,618
West Virginia		939			939	109		365	29		394	88	1,333	197
Wisconsin		203	316		519	393		221	118		339	284	858	677
Wyoming	1,909	1,869			3,778	486			2,624		2,624	38	6,402	524
Alaska		4,276			4,276	674						88	4,276	762
Puerto Rico		121			121	32			65		65	2	186	34
Total	57,906	41,152	14,163	36,381	149,602	28,408	22,188	19,354	25,041	7,746	74,329	21,274	223,931	49,682

TABLE 8.—*Construction and maintenance programs, fiscal year 1963, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	225	119			344	343	247	406	349		1,002	554	1,346	897
Arizona	1,292	1,739	3,578		6,609	890		442	651		1,093	395	7,702	1,285
Arkansas	287	517			804	506		311	830		1,141	345	1,945	851
California	4,293	3,500	7,135	2,100	17,028	4,020	8,256	3,741	595		12,592	1,010	29,620	5,030
Colorado	2,409	1,943	215		4,567	1,737		859	636		1,495	293	6,062	2,030
Florida	607	100	533		1,240	173						195	1,240	368
Georgia	456	509			965	487		452	913		1,365	368	2,330	855
Idaho	2,776	1,522	1,053	3,860	9,211	1,129	1,723	73	2,978		4,774	627	13,985	1,756
Illinois	1,206				1,206	581		255	106		361	455	1,567	1,036
Indiana	217	78			295	78		775	23		798	325	1,093	403
Iowa	125				125	15							125	15
Kentucky	1,111				1,111	373	557	366		4,930	5,853	415	6,964	788
Louisiana		14	581		595	404			324		324	142	919	546
Maine						6						15		21
Michigan	2,594	796			3,390	2,575		2,277			2,277	4,193	5,667	6,768
Minnesota	721	1,496	1,426		3,643	599		361	1,125		1,486	490	5,129	1,089
Mississippi	510	460			970	425	731	308	174		1,213	492	2,183	917
Missouri	2,556	434			2,990	998		1,475	1,291		2,766	753	5,756	1,751
Montana	4,417	1,090	1,642	2,650	9,799	629	2,234	306	1,477	655	4,672	431	14,471	1,060
Nebraska						6						1		7
Nevada	3,861		720		4,581	427						14	4,581	441
New Hampshire	331	373			704	339			340		340	238	1,044	577
New Mexico	2,151	422			2,573	606		652			652	300	3,225	906
North Carolina	1,271	47			1,318	965	1,311	2,355	899		4,565	1,132	5,883	2,097
North Dakota														
Ohio						369	3,022	3,442			6,464	3,193	6,464	3,562
Oklahoma						75			238		238	73	238	148
Oregon	7,803	2,936	1,104	5,500	17,343	2,203	2,919	1,412	4,211		8,542	841	25,885	3,044
Pennsylvania	870	1,800	521		3,191	427			280		280	67	3,471	494
South Carolina	326	349	284		959	567						175	959	742
South Dakota	2,973				2,973	354		1,559			1,559	176	4,532	530
Tennessee	1,367	456		9,363	11,186	500			607	6,017	6,624	109	17,810	609
Texas	305	491			796	243			448		448	332	1,244	575
Utah	761	1,129	942	1,335	4,167	450			1,528		1,528	346	5,695	796
Vermont		171			171	248		259	8		267	306	438	554
Virginia	1,147	1,679			2,826	1,944	1,015	361	242		1,618	1,223	4,444	3,167
Washington	3,991	520	364	599	5,474	1,448	2,995	1,270	2,774		7,039	1,265	12,513	2,713
West Virginia		356	187		543	114		393			393	88	936	202
Wisconsin		617			617	380			247		247	285	864	665
Wyoming	1,702	1,637			3,339	496		458	2,002		2,460	79	5,799	575
Alaska	1,016	2,296			3,312	691		114			114	90	3,426	781
Puerto Rico		121			121	41			65		65	3	186	44
Total	55,677	29,717	20,285	25,407	131,086	28,861	25,010	24,682	25,361	11,602	86,655	21,834	217,741	50,695

TABLE 9.—*Construction and maintenance programs, fiscal year 1964, by State and road group*

TABLE 9.—*Construction and maintenance programs, fiscal year 1964, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI-4	Total		Class 1	Class 2	Class 3	FAI-4	Total			
Alabama	500				500	345		565	266		831	553	1,391	898
Arizona	1,315	4,337	2,101		7,753	920		775			775	410	8,528	1,330
Arkansas	191	482			673	509		159	891		1,050	353	1,723	862
California	5,498	4,387	8,161	1,112	19,158	4,088	8,000	653	4,641		13,294	1,034	32,452	5,122
Colorado	3,483	2,000	733		6,216	1,771			1,119		1,119	314	7,335	2,085
Florida	522	123	540		1,185	137		129			129	192	1,314	329
Georgia	423	503	38		964	499		481	907		1,388	378	2,352	877
Idaho	2,846	813	623	3,860	8,142	1,144	2,111	215	3,339		5,665	628	13,807	1,772
Illinois	1,043				1,043	617	4	312	43		359	468	1,402	1,085
Indiana	760				760	78		232			232	325	992	403
Iowa	318				318	17							318	17
Kentucky	1,112				1,112	373		951		4,930	5,881	431	6,993	804
Louisiana		576	71		646	405			434		434	143	1,080	548
Maine			36		36	6						15	36	21
Michigan	2,901	98			2,999	2,575		1,744			1,744	4,193	4,743	6,768
Minnesota	693	402			1,095	628		545	3,283		3,828	536	4,923	1,164
Mississippi	1,494	588			2,082	441	21	179	156		356	510	2,438	951
Missouri	2,248	1,877			4,125	1,029		435	1,069		1,504	790	5,629	1,819
Montana	5,093	1,147	896	1,720	8,856	629	1,200	300	1,584	5,556	8,640	444	17,496	1,073
Nebraska		119			119	5			55		55	1	174	6
Nevada	1,795	1,010			2,805	425						15	2,805	440
New Hampshire	658				658	348			391		391	244	1,049	592
New Mexico		2,300			2,300	600		498	180		678	299	2,978	899
North Carolina	1,958	968			2,926	947	176	1,344	975		2,495	1,162	5,421	2,109
North Dakota														
Ohio						379	3,146	3,405	795		7,346	3,279	7,346	3,658
Oklahoma						75			234		234	75	234	150
Oregon	7,703	2,382	852	1,807	12,744	2,253	2,292	1,243	4,181		7,716	860	20,460	3,113
Pennsylvania	724	1,834	569		3,127	438			415		415	70	3,542	508
South Carolina	400	101	133		634	583		185	254		439	178	1,073	761
South Dakota	2,782	208			2,990	363		1,568			1,568	181	4,558	544
Tennessee	184	744			928	503			259		259	110	1,187	613
Texas	359	668			1,027	243		58	243		301	332	1,328	575
Utah	1,279	1,379	841	938	4,437	457			1,513		1,513	351	5,950	808
Vermont		297			297	260			22		22	317	319	577
Virginia	2,010	2,566			4,576	1,945		525			525	1,231	5,101	3,176
Washington	3,746	509	360	578	5,193	1,502	3,044	1,247	2,616		6,907	1,306	12,100	2,808
West Virginia		420	112		532	118		411			411	89	943	207
Wisconsin	175	443			618	378			323		323	283	941	661
Wyoming	4,351				4,351	505			2,271		2,271	117	6,622	622
Alaska	785	1,887			2,672	743		1,364			1,364	126	4,036	869
Puerto Rico		104			104	41			65		65	3	169	44
Total	59,409	35,271	16,066	10,015	120,761	29,322	19,994	19,523	32,524	10,486	82,527	22,346	203,288	51,668

TABLE 10.—*Construction and maintenance programs, fiscal year 1965, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	609				609	345		622	283		905	553	1,514	898
Arizona		3,912	891		4,803	950		3,640	83		3,723	425	8,526	1,375
Arkansas	191	661			852	511			772		772	363	1,624	874
California	7,039	4,000	2,027		13,066	4,109	2,571	2,368	1,450		6,389	1,023	19,455	5,132
Colorado	3,352	1,538	850		5,740	1,822			1,244		1,244	337	6,984	2,159
Florida						193	698	184	501		1,383	174	1,383	367
Georgia	460	1,067	149		1,676	510		532	960		1,492	384	3,168	894
Idaho	2,486	1,420	1,052	3,860	8,818	1,158	1,413		3,750		5,163	630	13,981	1,788
Illinois	1,799				1,799	656		406	102		508	482	2,307	1,138
Indiana	407	42			449	78		595	46		641	325	1,090	403
Iowa						8								8
Kentucky		430			430	373		1,016		4,930	5,946	447	6,376	820
Louisiana		374	62		436	405			474		474	143	910	548
Maine						6						16		22
Michigan	2,659		487		3,146	2,575		1,575			1,575	4,193	4,721	6,768
Minnesota		115			115	655		1,047	4,648		5,695	600	5,810	1,255
Mississippi	1,378	739			2,117	456		30	163		193	525	2,310	981
Missouri	1,376	1,893			3,269	1,056	1,098	78	1,298		2,474	831	5,743	1,887
Montana	3,297	618	1,143	2,800	7,858	626	2,351	324	1,281	5,499	9,455	461	17,313	1,087
Nebraska		40			40	5						1	40	6
Nevada		2,746	195		2,941	405						15	2,941	420
New Hampshire	408	175			583	358			348		348	251	931	609
New Mexico	2,741				2,741	610		714			714	300	3,455	910
North Carolina	2,219	1,292			3,511	953	112	963	1,171		2,246	1,220	5,757	2,173
North Dakota														
Ohio	2,726				2,726	390	955	3,121	695		4,771	3,365	7,497	3,755
Oklahoma						75		147			147	82	147	157
Oregon	7,745	1,697	672		10,114	2,295	2,148	1,945	4,469		8,562	877	18,676	3,172
Pennsylvania	1,059	452	306		1,817	452			48		48	73	1,865	525
South Carolina	399	157			556	599		143	151		294	190	850	789
South Dakota	3,007				3,007	372		1,547			1,547	185	4,554	557
Tennessee	425	363			788	557			255		255	148	1,043	705
Texas	359	32			391	243		39	603		642	332	1,033	575
Utah	1,461	528	1,541	779	4,309	464			1,804		1,804	357	6,113	821
Vermont		234	15		249	270		411	20		431	330	680	600
Virginia	3,596	442			4,038	1,936		813	196		1,009	1,260	5,047	3,196
Washington	3,580	553	347	551	5,031	1,570	3,035	1,241	2,617		6,893	1,348	11,924	2,918
West Virginia		235	338		573	126	275	147			422	89	995	215
Wisconsin	305	311			616	369			246		246	285	862	654
Wyoming	3,768				3,768	515			1,329		1,329	130	5,097	645
Alaska	954	4,125			5,079	782		262			262	129	5,341	911
Puerto Rico		124			124	42			65		65	4	189	46
Total	59,805	30,315	10,075	7,990	108,185	29,880	14,656	23,910	31,072	10,429	80,067	22,883	188,252	52,763

TABLE 11.—*Construction and maintenance programs, fiscal year 1966, by State and road group*

TABLE 11.—*Construction and maintenance programs, fiscal year 1966, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	577				577	345	54	500	262		816	554	1,393	899
Arizona	160	1,658	300		2,118	980		3,252	1,860		5,112	440	7,230	1,420
Arkansas	193	662			855	514		463	821		1,284	360	2,139	874
California	6,384	12,378	3,073	11,708	33,543	4,014	396		5,277		5,673	1,062	39,216	5,076
Colorado	2,511	1,804	1,113		5,428	1,895			1,345		1,345	355	6,773	2,250
Florida						193	622	92	558		1,272	181	1,272	374
Georgia	545	590			1,135	522		504	1,083		1,587	395	2,722	917
Idaho	2,121	825	810	3,860	7,616	1,172	2,862		3,117		5,979	631	13,595	1,803
Illinois	1,666				1,666	676		321	123		444	498	2,110	1,174
Indiana						78		1,018	146		1,164	325	1,164	403
Iowa		25			25	10							25	10
Kentucky		272			272	373		718		4,930	5,648	463	5,920	836
Louisiana		255	267		522	405			418		418	144	940	549
Maine						5		138			138	15	138	20
Michigan	1,869	182	1,026		3,077	2,575		545	280		825	4,193	3,902	6,768
Minnesota	452	610			1,062	684			4,381		4,381	649	5,443	1,333
Mississippi	1,261	558			1,819	472		308	168	4,368	4,844	552	6,663	1,024
Missouri	3,425	1,895	55		5,375	1,083			540		540	865	5,915	1,948
Montana	4,158	1,050	1,141	4,204	10,553	623		370	1,281		1,651	466	12,204	1,089
Nebraska						5						1		6
Nevada		585	790		1,375	369						16	1,375	385
New Hampshire	419				419	369		395	390		785	258	1,204	627
New Mexico		2,676			2,676	606		476	130		606	303	3,282	909
North Carolina	2,372		53		2,425	967		1,962	1,071	293	3,326	1,198	5,751	2,165
North Dakota														
Ohio						400	5,840	3,032	889		9,761	3,454	9,761	3,854
Oklahoma						75			76		76	84	76	159
Oregon	7,799	1,571	857		10,227	2,334	1,957	2,637	4,469		9,063	901	19,290	3,235
Pennsylvania		175	794		969	475			822		822	75	1,791	550
South Carolina	389				389	617		276	381		657	197	1,046	814
South Dakota	3,028				3,028	380		244	469		713	190	3,741	570
Tennessee	1,484	916			2,400	545			346		346	149	2,746	694
Texas						243		251	1,006		1,257	332	1,257	575
Utah	1,102	1,127	675	1,557	4,461	476			1,409		1,409	365	5,870	841
Vermont						280		1,190	94		1,284	344	1,284	624
Virginia	2,225	453	103		2,781	1,937		2,082	123		2,205	1,294	4,986	3,231
Washington	3,514	555	350	519	4,938	1,647	2,926	1,248	2,617		6,791	1,388	11,729	3,035
West Virginia	134		483		617	126		265	160		425	89	1,042	215
Wisconsin	415	198			613	388			244		244	284	857	672
Wyoming	3,585				3,585	525			1,329		1,329	143	4,914	668
Alaska	302	643			945	801		2,793			2,793	152	3,738	953
Puerto Rico		104			104	43			65		65	4	169	47
Total	52,090	31,767	11,890	21,848	117,595	30,227	14,657	25,080	37,750	9,591	87,078	23,369	204,673	53,596

TABLE 12.—*Construction and maintenance programs, fiscal year 1967, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI-4	Total		Class 1	Class 2	Class 3	FAI-4	Total			
Alabama	325	170	525		1,020	345		417			417	553	1,437	898
Arizona	885			6,097	6,982	1,075		608	1,518		2,126	455	9,108	1,530
Arkansas	165				165	541		299	766		1,065	360	1,230	901
California	5,020	3,771	8,372	4,979	22,142	4,043		830	3,230		4,060	1,050	26,202	5,093
Colorado	3,224	2,168		868	6,260	1,945			811		811	380	7,071	2,325
Florida		197			197	191		743	518		1,261	198	1,458	389
Georgia	466	570	86		1,122	533		444	1,016		1,460	401	2,582	934
Idaho	2,672	1,425	897	3,860	8,854	1,182	1,069		3,664		4,733	632	13,587	1,814
Illinois	436				436	696	835	164	115		1,144	512	1,580	1,208
Indiana	692	45			737	78		414	54		468	325	1,205	403
Iowa		31			31	9							31	9
Kentucky		452			452	373		900		6,640	7,540	478	7,992	851
Louisiana			820		820	406			365		365	146	1,185	552
Maine						5						15		20
Michigan	2,966	299	472		3,737	2,575		2,326			2,326	4,193	6,063	6,768
Minnesota	1,665	1,354	35		3,054	713		799	1,359		2,138	685	5,192	1,398
Mississippi	1,240	622			1,862	487		308	169	4,369	4,846	580	6,708	1,067
Missouri	2,231	1,486			3,717	1,092		26	668		694	904	4,411	1,996
Montana	3,143	732	1,141	2,186	7,202	621	565	266	1,281		2,112	467	9,314	1,088
Nebraska						6			55		55	2	55	8
Nevada						379			670		670	24	670	403
New Hampshire	415				415	378		395	383		778	266	1,193	644
New Mexico	2,488	59			2,547	614			666		666	306	3,213	920
North Carolina	1,058	35			1,093	969	616	1,985	1,215		3,816	1,207	4,909	2,176
North Dakota														
Ohio						414	3,961	3,004	239		7,204	3,550	7,204	3,964
Oklahoma						75			156		156	80	156	155
Oregon	7,911	1,705	838		10,454	2,375	1,973	754	4,431		7,158	917	17,612	3,292
Pennsylvania	1,661				1,661	498			79		79	79	1,740	577
South Carolina	364	508			872	632			306		306	216	1,178	848
South Dakota	3,042				3,042	388			705		705	194	3,747	582
Tennessee	145	494	367		1,006	545			434		434	151	1,440	696
Texas	1,312	246			1,558	243		42	114		156	332	1,714	575
Utah	876	327	710	2,420	4,333	484			1,453		1,453	372	5,786	856
Vermont		124			124	293		759	11		770	362	894	655
Virginia	2,664	1,176	72		3,912	1,980		1,106			1,106	1,329	5,018	3,309
Washington	3,476	569	350	598	4,993	1,720	1,936	1,243	2,727		5,906	1,433	10,899	3,153
West Virginia	150	272	150		572	124		283	157		440	89	1,012	213
Wisconsin		550			550	395			381		381	285	931	680
Wyoming	2,123		1,336		3,459	534			1,574		1,574	181	5,033	715
Alaska	2,393	767			3,160	819		1,818			1,818	171	4,978	990
Puerto Rico		104			104	44			65		65	5	169	49
Total	55,208	20,258	16,171	21,008	112,645	30,819	10,985	19,913	31,355	11,009	73,262	23,885	185,907	54,704

TABLE 13.—*Construction and maintenance programs, fiscal year 1968, by State and road group*

TABLE 13.—*Construction and maintenance programs, fiscal year 1968, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	402	531			933	347		557	284	322	1,163	552	2,096	899
Arizona	3,382	67		5,000	8,449	1,110			2,811		2,811	470	11,260	1,580
Arkansas	345	1,303			1,648	498			747		747	321	2,395	819
California	6,662	1,397	2,336	37,770	48,165	4,056	130	351	4,152		4,633	1,055	52,798	5,111
Colorado	2,691	1,527	1,204	4,636	10,058	1,996			1,528		1,528	403	11,585	2,399
Florida		138			138	188		766	588		1,354	203	1,492	391
Georgia	553	1,250			1,803	545		734	1,063		1,797	411	3,600	956
Idaho	2,814	590	1,449	3,953	8,806	1,192			3,846		3,846	633	12,652	1,825
Illinois	1,041				1,041	717		74	219		293	528	1,334	1,245
Indiana	737	287			1,024	78		224	21		245	325	1,269	403
Iowa		148			148	21							148	21
Kentucky		452			452	373		862		6,640	7,502	496	7,954	869
Louisiana		493	181		674	407			388		388	146	1,062	553
Maine						4			24		24	15	24	19
Michigan	2,979		372		3,351	2,575		1,881			1,881	4,193	5,232	6,768
Minnesota	2,501	1,085			3,586	741		696	1,456		2,152	723	5,738	1,464
Mississippi	1,340	461			1,801	501		331	158		489	598	2,290	1,099
Missouri	2,022	1,394		3,946	7,362	1,137		5	800		805	939	8,167	2,076
Montana	2,903	831	1,322	2,185	7,241	617	1,465	592	2,346		4,403	465	11,644	1,082
Nebraska		83			83	7						2	83	9
Nevada	600				600	392		760	505		1,265	45	1,865	437
New Hampshire	290	525	200		1,015	389	188		161	11,387	11,736	274	12,751	663
New Mexico		2,407			2,407	613			666		666	303	3,073	916
North Carolina	1,855	251			2,106	984	1,840	1,823	1,246		4,909	1,185	7,015	2,169
North Dakota														
Ohio						424	4,578	3,172	634		8,384	3,643	8,384	4,067
Oklahoma						75			173		173	80	173	155
Oregon	9,013	2,233	832	1,617	13,695	2,414	929	641	4,061		5,631	938	19,326	3,352
Pennsylvania	168	295	615		1,078	513			573		573	79	1,651	592
South Carolina	379	373			752	648			291		291	227	1,043	875
South Dakota	1,501	971	265		2,737	398		678	29		707	199	3,444	597
Tennessee	85	806			891	555		335			335	151	1,226	706
Texas	365	131			496	243		83	564		647	332	1,143	575
Utah	703	106	1,255	2,654	4,718	493		210	1,456		1,666	379	6,384	872
Vermont			15		15	305		254	14		268	376	283	681
Virginia	1,520	124			1,644	1,985	1,325	1,700	298		3,323	1,380	4,967	3,365
Washington	3,500	530	350	662	5,042	1,794	2,044	1,268	2,617		5,929	1,475	10,971	3,269
West Virginia	406		181		587	122		244	260		504	89	1,091	211
Wisconsin	115	442			557	384		306			306	286	863	670
Wyoming	3,460				3,460	545			944		944	207	4,404	752
Alaska		1,744			1,744	855		4,488			4,488	221	6,232	1,076
Puerto Rico		161			161	44			66		66	5	227	49
Total	54,332	23,136	10,577	62,423	150,468	31,285	12,499	23,035	34,989	18,349	88,872	24,352	239,340	55,637

TABLE 14.—*Construction and maintenance programs, fiscal year 1969, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	402				402	347		556	305	5,005	5,866	551	6,268	898
Arizona	4,533			5,000	9,533	1,145			2,000	269	2,269	485	11,802	1,630
Arkansas	288	573			861	515		463	908		1,371	360	2,232	875
California	6,177	9,556	6,218	6,423	28,374	4,046		239	395		634	1,066	29,008	5,112
Colorado	2,656	2,201	1,225	3,925	10,007	2,047			1,539		1,539	423	11,546	2,470
Florida		982			982	172			529		529	219	1,511	391
Georgia	459	711	34		1,204	558		701	939		1,640	419	2,844	977
Idaho	2,512	1,479	887	4,047	8,925	1,201	600		3,264		3,864	634	12,789	1,835
Illinois	1,006				1,006	738		366	169		535	550	1,541	1,288
Indiana		960			960	78	250	78	42		370	325	1,330	403
Iowa						9								9
Kentucky		453			453	373		1,109		6,640	7,749	513	8,202	886
Louisiana			606		606	408			388		388	147	994	555
Maine						4						15		19
Michigan	2,380	562			2,942	2,575		1,178			1,178	4,193	4,120	6,768
Minnesota	2,609	1,588			4,197	769			1,132		1,132	755	5,329	1,524
Mississippi	1,219	460			1,679	517		490	165		655	616	2,334	1,133
Missouri	2,025	1,884		2,468	6,377	1,165		156	611		767	976	7,144	2,141
Montana	3,101		883	2,352	6,336	621	1,399	731	2,235		4,365	477	10,701	1,098
Nebraska						7						2		9
Nevada						395		170	680		850	65	850	460
New Hampshire	726		330		1,056	400		420		9,242	9,662	380	10,718	780
New Mexico			1,346	1,435	2,781	620			680		680	301	3,461	921
North Carolina	2,291		6		2,297	962	260	2,117	1,292		3,669	1,203	5,966	2,165
North Dakota														
Ohio			73		73	436	3,532	3,248			6,780	3,741	6,853	4,177
Oklahoma						75			258		258	81	258	156
Oregon	9,262	3,529	1,631	1,617	16,039	2,455	364		3,226		3,590	956	19,629	3,411
Pennsylvania	429	430	480		1,339	521			255		255	84	1,594	605
South Carolina	377	371			748	662			316		316	239	1,064	901
South Dakota	1,043	2,135			3,178	405		929			929	204	4,107	609
Tennessee	113	1,336	88		1,537	558		45			45	152	1,582	710
Texas	364	622			986	243			60		60	332	1,046	575
Utah	1,355	477	940	1,574	4,346	500			1,613		1,613	385	5,959	885
Vermont	2,198				2,198	316						392	2,198	708
Virginia	1,096	661		15,240	16,997	1,974	1,181	2,366	347		3,894	1,411	20,891	3,385
Washington	3,680	584	343	586	5,193	1,871	1,947	1,255	2,650		5,852	1,515	11,045	3,386
West Virginia	125	507			632	120		207	260		467	90	1,099	210
Wisconsin		580			580	394		301			301	281	881	675
Wyoming	3,445		201		3,646	554			1,900		1,900	231	5,546	785
Alaska	987	622			1,609	874		3,353			3,353	244	4,962	1,118
Puerto Rico		201			201	45			66		66	5	267	50
Total	56,858	33,464	15,291	44,667	150,280	31,675	9,533	20,478	28,224	21,156	79,391	25,018	229,671	56,693

TABLE 15.—*Construction and maintenance programs, fiscal year 1970, by State and road group*

[Thousands of dollars]

TABLE 15.—*Construction and maintenance programs, fiscal year 1970, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	621	492			1,113	347		579	447		1,026	550	2,139	897
Arizona	4,251	1,506	5		5,762	1,180				4,268	4,268	550	10,030	1,730
Arkansas	289	671			960	515		244	786		1,030	370	1,990	885
California	14,832	3,199	2,151	43,248	63,430	3,987		6,872	2,556		9,428	1,033	72,858	5,020
Colorado	3,124	2,899		3,926	9,949	2,103			1,595		1,595	445	11,544	2,548
Florida		835			835	185		125	497		622	222	1,457	407
Georgia	644	882	96		1,622	568		654	967		1,621	425	3,243	993
Idaho	2,709	1,282	483	3,960	8,434	1,218	519	197	3,636		4,352	636	12,786	1,854
Illinois	1,278	42			1,320	759		338	204		542	574	1,862	1,333
Indiana						78	200	1,136	88		1,424	325	1,424	403
Iowa		168			168	8							168	8
Kentucky		977			977	373		1,030		6,640	7,670	532	8,647	905
Louisiana	149	516	95		760	412			501		501	150	1,261	562
Maine						5	424				424	14	424	19
Michigan	896	1,186			2,082	2,575		234			234	4,193	2,316	6,768
Minnesota	4,162	205			4,367	798		123	1,226		1,349	800	5,716	1,598
Mississippi	1,102	460			1,562	532	136	307	164		607	634	2,169	1,166
Missouri	2,265	1,368			3,633	1,198		440	722		1,162	1,024	4,795	2,222
Montana	1,674		135		1,809	625	1,712	730	2,697		5,139	494	6,948	1,119
Nebraska						7			55		55	2	55	9
Nevada						400			585		585	73	585	473
New Hampshire	493	423	300	1,462	2,678	411				6,821	6,821	482	9,499	893
New Mexico				2,124	2,124	632			687		687	301	2,811	933
North Carolina	1,219	76			1,295	902		2,502	1,413		3,915	1,231	5,210	2,193
North Dakota														
Ohio	2,541				2,541	448	479	3,088	159		3,726	3,842	6,267	4,290
Oklahoma						75			99		99	81	99	156
Oregon	8,390	2,941	1,454	2,816	15,601	2,495	1,459	409	3,025		4,893	975	20,494	3,470
Pennsylvania	939		343		1,282	531						90	1,282	621
South Carolina	380	107			487	678			357		357	252	844	930
South Dakota	2,024	1,164			3,188	415		262	440		702	208	3,890	623
Tennessee	402	450			852	560						156	852	716
Texas		709			709	243			768		768	332	1,477	575
Utah	1,511	472		2,182	4,165	510			1,721		1,721	392	5,886	902
Vermont	1,125	324	147		1,596	329	684	140			824	407	2,420	736
Virginia	1,208	429		34,344	35,981	1,999		2,883	214		3,097	1,428	39,078	3,427
Washington	2,793	561	342	617	4,313	1,949	2,073	1,213	2,506		5,792	1,556	10,105	3,505
West Virginia		611			611	120	348	117			465	90	1,076	210
Wisconsin		525			525	385		344			344	271	869	656
Wyoming	531	3,554			4,085	563			1,083		1,083	243	5,168	806
Alaska		2,744			2,744	915		1,804			1,804	269	4,548	1,184
Puerto Rico		122			122	46			67		67	6	189	52
Total	61,552	31,900	5,551	94,679	193,682	32,139	8,034	25,771	29,265	17,729	80,799	25,658	274,481	57,797

TABLE 16.—*Construction and maintenance programs, fiscal year 1971, by State and road group*

[Thousands of dollars]

State	Group A						Group B						Combined total, group A and group B	
	Construction programs					Maintenance programs	Construction programs					Maintenance programs	Construction programs	Maintenance programs
	Class 1	Class 2	Class 3	FAI–4	Total		Class 1	Class 2	Class 3	FAI–4	Total			
Alabama	508	135	387		1,030	347		560		2,096	2,656	550	3,686	897
Arizona	551	1,481	650		2,682	1,215				1,820	1,820	580	4,502	1,795
Arkansas	22	699			721	537	73	670	1,159		1,902	362	2,623	899
California	10,210	827	7,617	8,265	26,919	4,031			5,107		5,107	1,060	32,026	5,091
Colorado	2,182	1,551	1,811	2,830	8,374	2,163			1,720		1,720	470	10,094	2,633
Florida		1,018			1,018	178			522		522	231	1,540	409
Georgia	632	1,179	56		1,867	581		942	1,072		2,014	435	3,881	1,016
Idaho	2,699	951	108	6,172	9,930	1,201		280	3,038		3,318	637	13,248	1,838
Illinois	548	81			629	783	447	317	429		1,193	597	1,822	1,380
Indiana		415			415	78	240	783	112		1,135	325	1,550	403
Iowa		237			237	8							237	8
Kentucky		977			977	373		892		6,639	7,531	549	8,508	922
Louisiana		83	667		750	412			407		407	150	1,157	562
Maine						5						14		19
Michigan		1,099			1,099	2,575						4,193	1,099	6,768
Minnesota	2,466	909	70		3,445	826		806	1,095		1,901	833	5,346	1,659
Mississippi	1,085	167	70		1,322	542	100	779			879	644	2,201	1,186
Missouri	2,890	166			3,056	1,226		794	489		1,283	1,062	4,339	2,288
Montana	6,235				6,235	653		730	3,124		3,854	509	10,089	1,162
Nebraska		83			83	8						2	83	10
Nevada		1,040			1,040	389			500		500	95	1,540	484
New Hampshire	57		300		357	429	426	246			672	619	1,029	1,048
New Mexico				2,124	2,124	632			632		632	307	2,756	939
North Carolina	174	312	545		1,031	1,002	258	2,239	946		3,443	1,194	4,474	2,196
North Dakota														
Ohio	1,806		721		2,527	460		3,381			3,381	3,944	5,908	4,404
Oklahoma						75			54		54	81	54	156
Oregon	6,830	2,779	1,787	678	12,074	2,536	1,691	490	2,913		5,094	996	17,168	3,532
Pennsylvania	660				660	545			403		403	94	1,063	639
South Carolina	371	328			699	695			244		244	266	943	961
South Dakota		3,195			3,195	429			734		734	212	3,929	641
Tennessee	872	1,021	226		2,119	524			1,194		1,194	149	3,313	673
Texas		553			553	243		26	837		863	332	1,416	575
Utah	1,879	324	694	1,026	3,923	518			1,549		1,549	398	5,472	916
Vermont			15		15	342		98	42		140	425	155	767
Virginia	1,616	1,471	116	18,090	21,293	2,175		3,177	437		3,614	1,485	24,907	3,660
Washington	2,752	363	300	544	3,959	2,027	1,794	1,225	1,707		4,726	1,596	8,685	3,623
West Virginia		645			645	120		381	82		463	90	1,108	210
Wisconsin		604			604	389		270			270	280	874	669
Wyoming	2,747				2,747	573			1,083		1,083	255	3,830	828
Alaska		127			127	933		3,465			3,465	275	3,592	1,208
Puerto Rico		103			103	48			67		67	6	170	54
Total	49,792	24,923	16,140	39,729	130,584	32,826	5,029	22,551	31,698	10,555	69,833	20,302	200,417	59,128

TABLE 17.—*Summary of construction and maintenance programs, by fiscal years*

[Thousands of dollars]

	Group A		Group B		Combined			Group A		Group B		Combined	
	Construction	Maintenance	Construction	Maintenance	Construction	Maintenance		Construction	Maintenance	Construction	Maintenance	Construction	Maintenance
1962	149,602	28,408	74,329	21,274	223,931	49,682	1968	150,468	31,285	88,872	24,352	239,340	55,637
1963	131,086	28,861	86,655	21,834	217,741	50,695	1969	150,280	31,675	79,391	25,018	229,671	56,693
1964	120,761	29,322	82,527	22,346	203,288	51,668	1970	193,682	32,139	80,799	25,658	274,481	57,797
1965	108,185	29,880	80,067	22,883	188,252	52,763	1971	130,584	32,826	69,833	26,302	200,417	59,128
1966	117,595	30,227	87,078	23,369	204,673	53,596							
1967	112,645	30,819	73,262	23,885	185,907	54,704	Total	1,364,888	305,442	802,813	236,921	2,167,701	542,363

TABLE 18.—*Summary of reported construction needs forecast to remain after fiscal year 1971,[1] by State and road group*

[Thousands of dollars]

State	Group A needs							Group B needs							Combined total, group A and group B needs
	Class 1		Class 2		Class 3		Total	Class 1		Class 2		Class 3		Total	
	Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency		Present deficiency	Future deficiency	Present deficiency	Future deficiency	Present deficiency	Future deficiency		
Alabama		3,398		1,595	53	77	5,123		1,168		1,006	9,691	506	12,371	17,494
Arizona			4,315	7,414	3,050	1,428	16,207			3,789	2,817	24,559	1,238	32,403	48,610
Arkansas		104	4,053	3,674			7,831		82	5,823	71	12,216		18,192	26,023
California	38,784	64,060	1,249	32,917	77,324	137,456	351,790	330	5,980	7,902	15,312	227,364	81,896	338,784	690,574
Colorado	28,256	19,574	9,466	4,210	26,123	680	88,309			207	322	50,694	841	52,064	140,373
Florida			863	1,239			2,102			167	2,663	1,418	12	4,260	6,362
Georgia	83		1,337	870			2,290			292	877			1,169	3,459
Idaho	3,119	68	11,003		5,845	109	20,144	14,633	424	8,707	422	78,643	40	102,869	123,013
Illinois	5,934	1,104		227	2,048		9,313	2,356	706	2,431	2,152	7,662	1,971	17,278	26,591
Indiana		6,497	1,123	476			8,096		3,892	7,771	11,073	1,353		24,089	32,185
Iowa															
Kentucky	8,487		7,498	1,690	378		18,053			8,273	1,797	2,643	316	13,029	31,082
Louisiana					449		449					2,404	94	2,498	2,947
Maine					1,381		1,381	1,131		432		695		2,258	3,639
Michigan	2,123	42,510	1,845	5,474			51,952		5,361	47,378	3,021	2,647	1,090	59,497	111,449
Minnesota										804	498	4,776	864	6,942	6,942
Mississippi		18,905	6,373	3,956	65	344	29,643		1,901	9,610	8,109	1,256	1,234	22,110	51,753
Missouri		7,432		262			7,694			354	2,784	1,972		5,110	12,804
Montana	5,549		1,279		12,457		19,285	7,008		1,784	286	27,946	2,582	39,606	58,891
Nebraska			112	9			121					468		468	589
Nevada	3,040				730		3,770					4,317		4,317	8,087
New Hampshire	3,128	117	847	33	2,436	2,084	8,645	2,784		2,174	550	361	206	6,075	14,720
New Mexico		776	4,468	5,850	5,386		16,480			1,426	332	16,524		18,282	34,762
North Carolina			3,522	68	759	352	4,701			2,332	236	2,548		5,116	9,817
North Dakota															
Ohio	3,069		7,035		577		10,681	25,211		87,720	5,767	4,380		123,078	133,759
Oklahoma												560		560	560
Oregon	15,493	15,176	8,105	2,964	1,959	4,236	47,933	4,471		10,753	126	80,758	1,942	98,050	145,983
Pennsylvania	998	5,081	3,019	97	7,560	1,077	17,832				403	474	343	1,220	19,052
South Carolina		1,838		237			2,075				58	1,800	206	2,064	4,139
South Dakota	2,863	1,718		1,763	639		6,983			1,727		7,512		9,239	16,222
Tennessee	7,119	2,101	8,491	3,942	2,909	56	24,618			673	357	12,870	3	13,903	38,521
Texas	359	522		562	19	56	1,518			348	887	2,113	698	4,046	5,564
Utah				700	7,576	869	9,145				281	18,856	251	19,388	28,533
Vermont	830	893	289	339	532		2,883	1,351		1,674	1,582	9	12	4,628	7,511

Virginia	28,593	4,767	25,317	3,787	3,669	----------	66,035	6,150	16,460	45,008	2,603	10,703	53	80,877	146,912
Washington	3,649	1,133	----------	----------	4,483	----------	9,265	5,897	1,384	5,080	2,209	42,561	1,409	58,540	67,805
West Virginia	3,906	4,867	6,630	8,142	----------	142	22,586	2,151	861	4,843	4,684	14,700	848	28,087	50,673
Wisconsin	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	291	1,057	1,417	3,365	3,365
Wyoming	----------	----------	----------	----------	----------	----------	----------	----------	----------	126	----------	26,779	----------	26,905	26,905
Alaska	14	5,234	18,761	96	1,016	3,263	28,384	8,686	----------	31,208	----------	985	----------	40,879	69,263
Puerto Rico	----------	----------	627	----------	----------	----------	627	----------	----------	----------	----------	410	----------	410	1,037
Total	165,297	207,875	136,627	92,593	169,323	182,229	923,944	82,159	38,219	300,816	73,476	709,284	100,072	1,304,026	2,227,970

[1] No FAI-4 construction needs forecast to remain after fiscal year 1971.

Method of apportioning funds (stage 4)

The amounts necessary to finance the improvement programs as developed under the foregoing part of the study have, as indicated, been derived from several sources. However, the intent of the legislation with respect to the apportionment of funds for expenditure in the several States as referred to in section 3(b)4 of the act, has been interpreted to mean those funds specifically authorized for expenditure on the forest-highway system, i. e., forest-highway funds.

A brief discussion of the formula used in the past in the apportionment of forest-highway funds was given earlier in this report. This referred to the studies made in 1957 following the revaluation of the national forests. It was then determined, after a very exhaustive analysis and utilizing a number of different arrangements of forest areas and values, that a formula based on 75 percent area and 25 percent value was the most satisfactory that could be developed under the provisions contained in the basic act, since such a formula would most nearly retain the previous distribution of forest-highway funds among the States. Studies were also made, at that time, of apportionment methods involving elements other than those of area and value. These included population, road mileage, and needs in varying amounts both with and without area and value considerations.

The Federal-Aid Highway Act of 1958 required that forest-highway funds for fiscal years 1960 and 1961, and additional funds authorized for fiscal year 1959, be apportioned in the same percentage rates as funds apportioned for fiscal year 1958. This had the effect of restoring the historical 50–50 formula based on areas and values of the national forests as certified by the Secretary of Agriculture prior to 1957.

As stated above in the discussion concerning the program stage of the current study, to determine the scope of the construction program for each State, the amount of forest-highway funds forecast to be available was projected on the basis of the current total authorization ($33 million annually) with apportionment to the States in the same amounts as for fiscal years 1960 and 1961. Following the development of the programs an analysis of apportionments was made, taking into consideration all facets of the situation. This included comparisons between forest-highway funds and total funds available and the needs forecast to be retired within the program period compared with total needs. Great variations between the several States are readily apparent. The amount of the forest-highway funds available is but one of a number of factors which influence this pattern. Other factors are—

The variations in needs.

The great variation in the class of roads. (The class of road in turn, of course, directly influences the amount of funds available—Federal-aid Interstate, primary and secondary).

The projected availability of funds from local sources.

If forest-highway funds were the only funds available to finance the necessary improvement programs, the establishment of an apportionment formula based on needs alone could readily be developed. A formula might be developed in which needs constitute an important factor, combined with other factors such as national-forest areas and values. However, when it is considered that approximately two-thirds of the road mileage included in the study is coincident with the

Federal-aid system and that this pattern is by no means uniform among the several States, it becomes obvious that no simple formula is possible. Therefore, continuation of the method of apportioning forest-highway funds provided in the Federal-Aid Highway Act of 1958 appears to be the most reasonable solution.

The annual apportionments thus forecast and the total amount for each State for the 10-year period are shown by table 19. In actual program computations the amount of forest-highway funds available for construction was estimated after taking into consideration the percentage of annual apportionments necessary for the administration of the overall forest-highway program by the Forest Service and the Bureau of Public Roads.

Consideration should be given to the elimination of the apportionment of forest-highway funds to those States now receiving such small amounts annually that the cost of administration is out of proportion to the benefits received. This situation is further complicated by the fact that lapsing provisions are now contained in the authorization of forest-highway funds. This makes it difficult to accumulate sufficient funds to finance a construction project large enough to secure adequate competition in bidding unless forest-highway funds are combined with other funds. In view of this situation it appears advisable that no apportionment should be made to a State if the sum to be apportioned to such State is less than $5,000. Any such sum that is not apportioned to a State, because it is less than $5,000, should be apportioned to the remaining States.

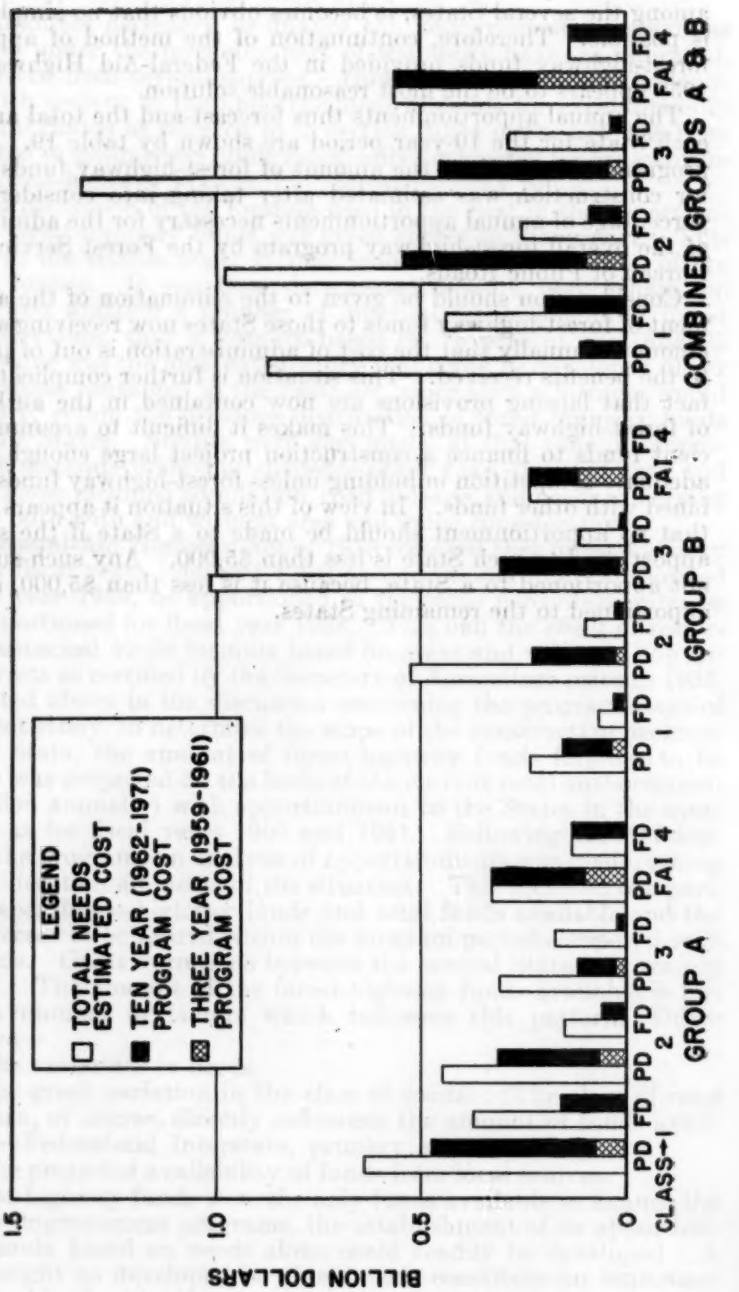

REPORTED CONSTRUCTION NEEDS AND CONSTRUCTION PROGRAMS
LEGEND
TOTAL NEEDS ESTIMATED COST
TEN YEAR (1962-1971) PROGRAM COST
THREE YEAR (1959-1961) PROGRAM COST
BILLION DOLLARS
1.5
1.0
0.5
0
CLASS-1 PD FD PD 2 FD PD 3 FD PD FD FAI 4
GROUP A
PD FD PD 1 FD PD 2 FD PD 3 FD PD FD FAI 4
GROUP B
PD FD PD 1 FD PD 2 FD PD 3 FD PD FD FAI 4
COMBINED GROUPS A & B

FIGURE 2

FIGURE 3

ESTIMATED AMOUNTS AND PROBABLE SOURCES OF CONSTRUCTION PROGRAM FUNDS

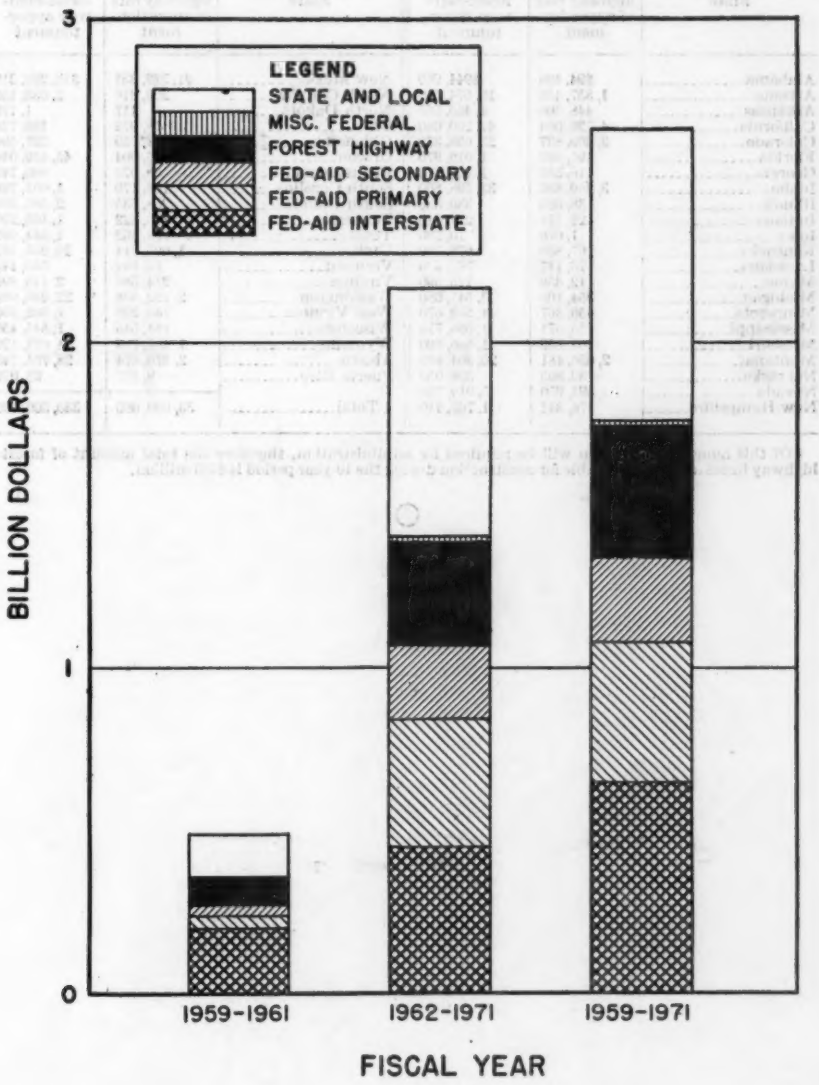


TABLE 19.—*Amounts of forest-highway funds assumed to be available for 10 fiscal year period (1962–71)*

[Based on $33 million annual authorization and fiscal year 1960 rate of apportionment]

State	Fiscal year 1960 forest-highway rate of apportionment	10-year (fiscal year 1962–71) forest-highway apportionment	State	Fiscal year 1960 forest-highway rate of apportionment	10-year (fiscal year 1962–71) forest-highway apportionment
Alabama	$94,496	$944,960	New Mexico	$1,322,331	$13,223,310
Arizona	1,857,456	18,574,560	North Carolina	203,316	2,033,160
Arkansas	448,606	4,486,060	North Dakota	117	1,170
California	4,726,004	47,260,040	Ohio	18,072	180,720
Colorado	2,369,837	23,698,370	Oklahoma	22,759	227,590
Florida	191,697	1,916,970	Oregon	4,545,904	45,459,040
Georgia	116,261	1,162,610	Pennsylvania	88,074	880,740
Idaho	3,359,886	33,598,860	South Carolina	108,179	1,081,790
Illinois	38,033	380,330	South Dakota	258,535	2,585,350
Indiana	22,121	221,210	Tennessee	110,622	1,106,220
Iowa	1,070	10,700	Texas	104,462	1,044,620
Kentucky	67,835	678,350	Utah	1,095,914	10,959,140
Louisiana	76,147	761,470	Vermont	59,044	590,440
Maine	12,359	123,590	Virginia	214,589	2,145,890
Michigan	354,108	3,541,080	Washington	2,293,608	22,936,080
Minnesota	456,367	4,563,670	West Virginia	130,226	1,302,260
Mississippi	155,671	1,556,710	Wisconsin	184,545	1,845,450
Missouri	168,659	1,686,590	Wyoming	1,407,712	14,077,120
Montana	2,630,481	26,304,810	Alaska	2,876,474	28,764,740
Nebraska	30,805	308,050	Puerto Rico	9,307	93,070
Nevada	591,970	5,919,700			
New Hampshire	176,341	1,763,410	Total	33,000,000	[1] 330,000,000

[1] Of this amount $10 million will be required for administration, therefore the total amount of forest-highway funds assumed available for construction during the 10-year period is $320 million.